Columbia University
Graduate School of Architecture, Planning and Preservation

Architecture Program Report for 2013 NAAB Visit for Continuing Accreditation

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I.1.1. History Mission

A. History and Mission of the Institution

Columbia University was founded in 1754 as King's College by royal charter of King George II of England. It is the oldest institution of higher learning in the state of New York and the fifth oldest in the United States.

The American Revolution brought the growth of the College to a halt, forcing a suspension of instruction in 1776 that lasted for eight years. The College reopened in 1784 with a new name—Columbia—that embodied the patriotic fervor that had inspired the nation's quest for independence. In 1857, the College moved from Park Place, near the present site of city hall, to 49th Street and Madison Avenue, where it remained for the next 40 years. During the last half of the 19th century, Columbia rapidly assumed the shape of a modern University. The Columbia School of Law was founded in 1858. The country's first mining school, a precursor of today's Fu Foundation School of Engineering and Applied Science, was established in 1864 and awarded the first Columbia Ph.D. in 1875.

When Seth Low became Columbia's president in 1890, he placed the fragmented federation of autonomous and competing schools under a central administration that stressed cooperation and shared resources. Barnard College for women had become affiliated with Columbia in 1889; the medical school came under the aegis of the University in 1891, followed by Teachers College in 1893. The development of graduate faculties in political science, philosophy, and pure science established Columbia as one of the nation's earliest centers for graduate education. In 1896, the trustees officially authorized the use of yet another new name, Columbia University, and today the institution is officially known as Columbia University in the City of New York.

Low's greatest accomplishment, however, was moving the University from 49th Street to the more spacious Morningside Heights campus, designed as an urban academic village by McKim, Mead, and White, the renowned architectural firm. Architect Charles Follen McKim provided Columbia with stately buildings patterned after those of the Italian Renaissance.

During the presidency of Nicholas Murray Butler (1902–1945), Columbia emerged as a preeminent national center for educational innovation and scholarly achievement. The School of Journalism was established by bequest of Joseph Pulitzer in 1912. John Erskine taught the first Great Books Honors Seminar at Columbia College in 1919, making the study of original masterworks the foundation of undergraduate education, and in the same year, a course on war and peace studies originated the College's influential Core Curriculum.

The study of the sciences flourished along with the liberal arts. Franz Boas founded the modern science of anthropology here in the early decades of the twentieth century, even as Thomas Hunt Morgan set the course for modern genetics. In 1928, Columbia–Presbyterian Medical Center, the first such center to combine teaching, research, and patient care, was officially opened as a joint project between the medical school and The Presbyterian Hospital.

Research into the atom by faculty members I. I. Rabi, Enrico Fermi, and Polykarp Kusch brought Columbia's Department of Physics to international prominence in the 1940s. The founding of the School of International Affairs (now the School of International and Public Affairs)

in 1946 marked the beginning of intensive growth in international relations as a major scholarly focus of the University. The oral-history movement in the United States was launched at Columbia in 1948.

Columbia celebrated its bicentennial in 1954 during a period of steady expansion. This growth mandated a major campus building program in the 1960s, and, by the end of the decade, five of the University's schools were housed in new buildings. It was also in the 1960s that Columbia experienced the most significant crisis in its history. Currents of unrest sweeping the country—among them opposition to the Vietnam War, an increasingly militant civil rights movement, and the ongoing decline of America's inner cities—converged with particular force at Columbia, casting the Morningside campus into the national spotlight. More than 1,000 protesting students occupied five buildings in the last week of April 1968, effectively shutting down the University until they were forcibly removed by the New York City police. Those events led directly to the cancellation of a proposed gym in Morningside Park, the cessation of certain classified research projects on campus, the retirement of President Grayson Kirk, and a downturn in the University's finances and morale. They also led to the creation of the University Senate, in which faculty, students, and alumni acquired a larger voice in University affairs.

In recent decades, Columbia's campuses have seen a revival of spirit and energy that have been truly momentous. Under the leadership of President Michael Sovern, the 1980s saw the completion of important new facilities, and the pace intensified after George Rupp became president in 1993. A 650-million-dollar building program begun in 1994 provided the impetus for a wide range of projects, including the complete renovation of Furnald Hall and athletics facilities on campus and at Baker Field, the wiring of the campus for Internet and wireless access, the rebuilding of Dodge Hall for the School of the Arts, the construction of new facilities for the Schools of Law and Business, and the renovation of Butler Library.

The University also continued to develop the Audubon Biotechnology and Research Park, securing Columbia's place at the forefront of medical research. Columbia is also is contributing to economic growth through the creation of private-sector research collaborations and the generation of new biomedically related business. A new student-activities center, Alfred Lerner Hall, opened in 1999, and in 2011, the Northwest Corner building, the last building that will be built on the Morningside campus, opened as an interdisciplinary science research center. These and other improvements to the University's physical plant provide a visible reminder of the continuing growth and development of Columbia's programs of research and teaching. From its renowned Core Curriculum to the most advanced work now under way in its graduate and professional schools, the University continues to set the highest standard for the creation and dissemination of knowledge, both in the United States and around the world.

As one of the world's most important centers of research and a distinctive and distinguished learning environment for undergraduates and graduate students, Columbia recognizes the importance of its location in New York City and seeks to link its research and teaching to the vast resources of a great metropolis. It seeks to attract a diverse and international faculty and student body, to support research and teaching on global issues, and to create academic relationships with many countries and regions. It expects all areas of the University to advance knowledge and learning at the highest level and to convey the products of its efforts to the world.

B. History and Mission of the Program

Program History

One of the first architecture schools in America, Columbia was established in 1881 by William R. Ware within the School of Mines (the precusor of the School of Engineering). A former apprentice of Richard Morris Hunt (the first American to attend the École des Beaux-Arts in Paris), Ware had started the nation's first school of architecture at M.I.T in 1865 and approached architectural education from a humanistic point of view. His appointment capped a distinguished career as a practicing architect, scholar, and teacher. It established the precedent, followed since then at Columbia, of a professional program guided by practicing architects and informed by the highest levels of humanistic learning and scholarship within the research University. In Ware's words, "The problem before us in this country is to devise a course of study so carefully adjusted that the practical, scientific and artistic studies may receive equal consideration." Ware saw the school as the synthesis of all the professional lessons he had learned in Hunt's studio and the scholarship born from deep research in the University, with both the professional and academic sides nurtured by the remarkable research library of drawings, books, lantern slides, casts, and material samples he built, a collection that would soon grow into the world's leading architectural library. The crucial role of international travel in the Columbia program was already initiated in 1889 when Charles McKim, of the reknown office McKim, Mead, and White, established the first travelling fellowship.

In its early years, Columbia's was the leading preparatory program for would-be architects intent on studying at the École des Beaux-Arts in Paris. But by 1902 it had matured into a full-scale School of Architecture. Ware retired in 1903, to be succeeded by his former student A. D. F. Hamlin, who had been the first faculty member he recruited in 1882 to direct instruction in design through a sequence of progressively more difficult building programs. Hamlin was an authority on the history of ornament and the author of the first American survey of western architecture. His 1896 *A Text-Book of the History of Architecture* and its successive editions become a key element in the growth of architectural education in the United States. Hamlin stepped down from the position in 1912, when, with an enrollment of 140, the School moved into its new quarters, Avery Hall, designed by the Charles McKim. Hamlin was succeeded by Austin Willard Lord (1912–1915) and William Harry Carpenter (1915–1919).

In 1931, William A. Boring, who had been the School's director since 1919, became the first dean of what was then called the Faculty of Architecture. Under Boring and under his successor Joseph Hudnut, who took over in 1933, the curriculum was broadened dramatically. While the pre–World War I era had been dominated by the academic classicism of Ware, Hamlin, and such leading professionals as Charles McKim, Thomas Hastings, and Henry Hornbostel, all of whom taught at the school, Boring and especially Hudnut encouraged the then nascent modernism and incorporated studies in town planning. Important studio critics, including the urbanistically inclined skyscraper architects Harvey Wiley Corbett and Wallace K. Harrison, joined the English town planner Raymond Unwin and the architectural historian Talbot Hamlin to create an environment in tune with the dramatic social and economic changes of the interwar years.

With Hudnut's departure for Harvard in 1935, the School, under the new Dean, Leopold Arnaud, entered into a gradual decline that only began to reverse itself in the late 1950s when provocative studio critics Percival Goodman and Alexander Kouzmanoff, as well as the historian James Marston Fitch, gave the program new energy. Fitch's courses in architectural history blossomed into a program in historic preservation, established in 1966 as the first at an American University. The School continually benefited from New York City's prominence as a world capital and attracted many foreign students, some of whom would grow to professional prominence, including figures like architects Romaldo Giurgola and Michael McKinnell.

After the short and vital but stormy tenure of Charles Colbert (1960–1963), Kenneth A. Smith, an engineer, was appointed dean, and in 1965 the School was organized along divisional lines, with planning and architecture each having its own department. Charles Abrams was the first planning chair and Romaldo Giurgola, the first for architecture. Abrams, with his wide experience in New York real estate and social planning, and his deep humanity, forged a program that balanced statistical analysis with compassion and earthy pragmatism. Giurgola built upon the design strengths of Kouzmanoff and Goodman, bringing into the studios as first-time teachers such bright young architects as Gio Pasanella, Jacquelin Robertson, Robert Kliment, and Ada Karmi Melamede.

The School's students played a central role in the protests that engulfed the University in the spring of 1968. While the tumultuous campus-wide demonstrations of that watershed year were triggered by a concern for America's role in international affairs, the architecture students played a particularly strong role in focusing the debate on the University's relationship to its neighbors in the Morningside Heights and Harlem communities. In addition, the students challenged the University's lackluster building program, protesting the construction of Uris Hall and the proposed gymnasium for Morningside Park.

James Stewart Polshek became dean in 1972 and led the School until 1988. With strong professional connections with designer-architects, preservationists, and planners, Polshek tapped the School's inherent strengths and refined the graduate program while healing the wounds left over from the previous decade. He reshaped the design faculty with new hires and enriched the School's offerings in architectural history and theory, which were under the leadership of Kenneth Frampton, who also came to Columbia in 1972. Richard Plunz's arrival two years later as an authority on urban design and housing was crucial in deepening the School's core strength and with the arrival of the social historian Gwendolyn Wright and the historian of 20th century modernism Mary McLeod a nucleus of leading scholars was established to complement the designers. As important, Polshek extended the School's reach both within and beyond the University, establishing a strong program of public lectures featuring leading architects, planners, and politicians; creating special programs for undergraduates in Columbia and Barnard Colleges; a Masters program in Real Estate Development, and helping establish the Temple Hoyne Buell Center for the Study of American Architecture in 1983. Under Polshek and his faculty, including especially Frampton, Giurgola, and Robert A. M. Stern, Columbia became an important focal point in the postmodernist debate.

Bernard Tschumi became dean in 1988, and the School's architecture programs, reflecting changing concerns in design, became more experimental as they began to take on a more international flavor, capitalizing as never before on New York's status as a world city. To stimulate a sense of invention at the School and to use it as a laboratory for ideas, Tschumi gave junior faculty the freedom to be creative, expanding their research in the context of their studios. Sensing the role that computers would play in architectural design today, he fostered one of architecture's most significant forays into the digital age. The School hosted a series of pioneering investigations of the new potentials in architectural practice and acted as a center of international debate on the state-of-the-art in the field. During his time as dean, Tschumi tenured key faculty in architectural theory as well as practice, including Stan Allen, Steven Holl, Laurie Hawkinson, and Mark Wigley. Under Dean Tschumi, the School also developed a highly successful post-professional program, the degree in Advanced Architectural Design, as well as a Ph.D. in architecture that likewise rapidly developed into one of the very top international programs.

Professor Mark Wigley became dean in 2004 after a year as interim dean, and the School began to expand and augment the design research culture established by Bernard Tschumi. The collaborative links between all the programs and between the School and the wider University and professional community were intensified. New forms of aesthetic, technical, philosophical, professional, and ethical engagement were cultivated. The size of the full time faculty, tenured faculty, and range of expertise was substantially increased and a Professor in Practice track was initiated to allow practitioners with substantial time demands from their offices to play a leadership role at the heart of the School. During his time as dean, Wigley has tenured Reinhold Martin, Michael Bell, Mabel Wilson and Felicity Scott in architecture. Juan Herreros, Lise Anne Couture and Mario Gooden were brought in as Professors in Practice and the tenure track faculty was strengthened with the hiring of Kate Orff, Galia Solomonoff, Hilary Sample, Amale Andraos, David Benjamin, Laura Kurgan and Enrique Walker as a new generation of accomplished architects with skills ranging across architectural design, landscape design, mapping, data, interactive environments, public health, research and criticism. Applied Research was developed into a major part of the School with the establishment of a new set of active research labs addressing different dimensions of the built environment. Material science and the building industry became a major point of focus for the School, with international conferences, think-tanks, collaborative studios, research initiatives, and publications. As part of this broadened design research culture, the School has developed another highly successful program, the Masters in Critical, Curatorial and Conceptual Practices, to bridge the gap between the professional and Ph.D. programs. Over the last five years, the School's global engagement has been substantially increased with the establishment of a new network of design research centers in New York, Beijing, Mumbai, Rio, and Amman, with centers in Moscow, Istanbul and Johannesburg now being launched to complete the network. These "Studio-X" centers have become an integral part of the curriculum and greatly deepen the School's ability to engage the international professional, academic, technical, and public communities in a new kind of collaborative conversation and research practice. The culmination of this global network is a major Center for Global Design and Development (CGDD) designed by SHoP Architects and now being constructed on the Columbia campus (scheduled to open in Fall 2013) where GSAPP will act as the host for University-wide collaborative debate and research about the future of cities. The CGDD will complete the integration of the M.Arch program into the wider University and bring a wealth of comparitive knowledge about contemporary professional practice around the world into the School and the program. In parallel with this substantial expansion of the School's engagement and applied research culture, the core curriculum has been steadily refined into a more demanding set of requirements and performance expectations and the range of advanced and elective options has been greatly increased.

With a revived curriculum, faculty, and research culture the School continues to foster a dynamic evolution of architectural professionalism, artistry, intelligence, and technical expertise in partnership with its students in the sprit established by its founder William Ware in 1881.

Program Mission

The Graduate School of Architecture, Planning and Preservation (GSAPP) is dedicated to the professional training of the next generation of architects, preservations, urban planners, and academics. It seeks to provide a thorough preparation for the international practitioner while actively participating in the wider academic culture of a leading research University. The School tries to integrate these two goals, treating the professional care of the built environment as a form

of rigorous research in its own right with important contributions to make to interdisciplinary studies within the University as a crucial resource and part of the professional responsibilities of the architect in practice.

To achieve this double goal, the basic structure of the M.Arch Program combines a strict core of fundamental skills and knowledge with an advanced research culture. Both the core and advanced parts of the Program are understood to be vital to the School's ability to help the next generation of professional dedicated to the built environment. Indeed, the experimental ethos of the School is understood as its major responsibility to both the University and the profession. This fusion of professional and experimental is the School's unique mission and the basis of its international leadership role. The Program devotes itself to the highest contemporary standards of professional practice through a very demanding program of study while creating the seeds for future standards through advanced investigations. The advanced work is dependent upon the core work, with a steady transition between core and advanced courses as students progress through the Program. Students are immersed in the accumulated wisdom and techniques of the profession--as represented by the historical and contemporary holdings in Avery Library, the diverse expertise of the faculty and their professional colleagues and consultants in the surrounding city, and a coordinated set of required courses--before being encouraged to participate in the evolution of new skills, approaches, technologies, and goals. This approach draws on the energy and imagination of a very diverse and highly motivated group of students and faculty to frame and investigate the key questions facing the profession in a collaborative manner. The result is a very intense program in which students, faculty, and administration serve each other in the usual sense of maintaining the highest level of architectural training and passing on best practices but are also understood as colleagues dedicated to each other in furthering the state-of-the-art in the discipline. The mission is to produce graduates who will play a key leadership role in the architectural profession, responsibly and creatively, serving their colleagues, clients, and communities around the world. The School seeks to benefit from being one of the most global of all schools, with students from more than 50 countries, but equally understands the unique professional demands in each of these countries and the increasingly global context of all practice as a major pedagogical responsibility.

GSAPP is highly integrated into the wider University, and takes advantage of its unique asset of including under one roof all the disciplines devoted to the stewardship of the built environment (architectural design, urban design, urban planning, historic preservation, and real estate development), with each one sharing the same overall set of goals. Each of the respective programs works to train its graduates at the very highest possible level in both professional practice and exploratory research, while also collaborating to generate a holistic approach to the environment. The graduate programs in architecture and planning are complemented by the undergraduate programs (Introduction to Architecture, the New York Paris Program, and the affiliated Architecture Program in Barnard College), post-professional programs (Master of Science in Advanced Architectural Design, Master of Science in Architecture and Urban Design, Master of Science in Real Estate Development, Master of Science in Critical, Curatorial and Conceptual Studies in Architecture), and post-graduate programs (Ph.D. in architectural History and Theory, and Ph.D. in Urban Planning). The M.Arch program acts as the flagship program of the School, with approximately one-third of the overall student Full-Time Enrollment of the School, but each and every program is meant to be an international leader. Increasingly, this kind of leadership is made possible by interdisciplinary collaboration on teaching, research, and applied projects. A collegial spirit and intense dedication to the major challenges facing stewards of the built environment drives every aspect of School life, and keeps setting new goals to be

energetically pursued, with the results communicated to an international audience. The School demands of itself that it be one of an extremely small group of programs that provide this kind of international leadership. The Dean's Statement—which appears on the School website and in each year's publication of student work, and is elaborated in numerous documents, speeches, and interviews and repeatedly communicated to prospective students, faculty, and alumni—identifies the School's core mission. It was prepared when the Dean first took up his position and published in the School's annual publication of student work alongside a statement by the President of the University, reflecting their shared goals. In the President's Statement, Lee Bollinger wrote, "The distinctive urban University and an integral part of one in the great cities of the world, Columbia embodies New York City's qualitie—it has always been international in scope, forward-looking in purpose, and unique in how it addresses the important questions of the day. The Graduate School of Architecture, Planning and Preservation has also been at the forefront of thinking innovatively and comprehensively about culture, society, urban life, and their special evolution. GSAPP has led the field in theory and practice for decades and continues to help redefine architecture and planning—most recently, for example, in applying new technologies and media to architectural design. The capacity to freshly imagine our cities and societies has never been more important in the world of rapidly changing science, technology, and social challenges and opportunities in which we live today."

The main point of the Dean's Statement is that the unique mission of GSAPP turns on the capacity of each teacher to pass on the wisdom and best practices of the discipline while opening up the possibility for evolution through intense investigation. All aspects of the Program, including curriculum, faculty, classes, studio topics, visitors, events, publications, and exhibitions, are continuously tailored towards this ambition to equip and empower the next generation of architects for practice in a globalized workplace.

Dean's Statement (2003)

Education is all about trust. The best teachers embrace the future by trusting the student, supporting the growth of something that cannot be seen yet, an emergent sensibility that cannot be judged by contemporary standards. A school dedicated to the unique life and impact of the thoughtful architect must foster a way of thinking that draws on everything that is known in order to jump into the unknown, trusting the formulations of the next generation that by definition defy the logic of the present. Education becomes a form of optimism that gives our field a future by trusting the students to see, think, and do things we cannot.

This kind of optimism is crucial at a school like the GSAPP at Columbia. The students arrive in New York City from around 55 different countries armed with an endless thirst for experimentation. It is not enough for us to give each of them expertise in the current state-of-the-art in architecture so that they can decisively assert themselves around the world by producing remarkable buildings, plans, and policies. We also have to give them the capacity to change the field itself, to completely redefine the state-of-the-art. More than simply training architects how to design brilliantly, we redesign the figure of the architect. Columbia's leadership role is to act as a laboratory for testing new ideas about the possible roles of designers in a global society. The goal is not a certain kind of architecture but a certain evolution in architectural intelligence.

Architecture is a set of endlessly absorbing questions for our society rather than a set of clearly defined objects with particular effects. Architects are public intellectuals, crafting forms that allow others to see the world differently and perhaps to live differently. The real gift of the best architects is to produce a kind of hesitation in the routines of contemporary life, an opening in

which new potentials are offered, new patterns, rhythms, moods, sensations, pleasures, connections, and perceptions. The architect's buildings are placed in the city like the books of a thoughtful novelist might be placed in a newsstand in a railway station, embedding the possibility of a rewarding detour amongst all the routines, a seemingly minor detour that might ultimately change the meaning of everything else. The architect crafts an invitation to think and act differently.

GSAPP likewise cultivates an invitation for all the disciplines devoted to the built environment to think differently. Its unique mission is to move beyond the highest level of professional training to open a creative space within which the disciplines can rethink themselves, a space of speculation, experimentation, and analysis that allows the field to detour away from its default settings in order to find new settings, new forms of professional, scholarly, technical, and ethical practice.

The heart of this open-ended laboratory is the design studios. All the overlapping and interacting programs at the school--Architecture, Urban Design, Historic Preservation, Urban Planning, and Real Estate Development--teach design and are united in their commitment to the global evolution of the 21st Century city. Every semester, the School launches more than 35 explorative studio projects that head off in different directions before reporting back their findings in juries, exhibitions, and publications that stimulate an intense debate and trigger a new round of experiments. With a biodiversity of continually evolving research trajectories, the school operates as a multi-disciplinary think tank, an intelligent organism thinking its way through the uncertain future of the discipline and the global society it serves.

As in any other architecture school, the real work is done in the middle of the night. Avery Hall, the school's neo-classical home since 1912--with its starkly defined symmetrical proportions communicating to the world the old belief that the secret of architectural quality is known, universal, and endlessly repeatable--now acts as the late night incubator of a diversity of possible futures. At its base is Avery Library, the most celebrated architectural collection in the world, a remarkable container of everything architects have been thinking about in the past, neatly gathered within the traditional quiet space of a well-organized archive. Up above are the dense and chaotic studio spaces bristling with electronics and new ideas. Somewhere between the carefully catalogued past and the buzz of the as yet unclassifiable future, the discipline evolves while everyone else sleeps. Having been continuously radiated by an overwhelming array of classes and waves of visiting speakers, symposia, workshops, exhibitions, and debates, the students artfully rework the expectations of their discipline.

The pervasive atmosphere at GSAPP, the magic in the air from the espresso bar to the pin-up walls to the front steps to the back corner of the big lecture hall, is the feeling of being on the cutting edge, straddling the moving border between the known and the unknown in our field. It is hopefully an open questioning atmosphere in which students are able to do work that teaches their teachers. In the end, a school's most precious gift is its generosity towards the thoughts that the next generation has yet to have.

I.1.2. Learning Culture and Social Equity

The core values of the studio culture are communicated in the Studio Culture Policy statement agreed upon by faculty and student representatives, voted on by the full faculty in January of 2009, and posted on the school website:

A dynamic and supportive studio culture is the central aspect of life at the GSAPP for both students and design faculty and the core of the learning culture. The studio environment is fundamentally collaborative, in both the formal sense of design studios such as the first semester of the second year requiring students to work in teams, and in the informal sense of students at all levels sharing skills, insights, and information. But also in the sense of faculty collaborating with students, particularly in the advanced studios. Mutual respect and shared enthusiasm drives the studio culture. Interdisciplinary work is encouraged. Faculty-to-student ratios are maintained that allow for optimal contact hours with each student. Core studio deadlines are coordinated with other core courses to avoid overload and final studio reviews and history/theory/technology assignments are staggered to minimize any overlap of deadline. Design reviews are conducted in the spirit of open debate among both faculty and students and are open to other students and visitors to the School. A comprehensive on-site computer infrastructure, installed and managed by the GSAPP, as well as on-site advanced modeling and fabrication facilities, encourage students to work in the design studios on a regular basis. Campus security allows students to feel comfortable 24 hours a day. This is supplemented with regular social activities, as well as a wide range of public, evening lectures and other events that enhance the overall GSAPP environment as a site of ongoing cultural exchange. In sum, the overall studio experience is one of the highlights of a GSAPP education.

To accomplish its goal of sustaining both the highest standards of professional training and an advanced design research environment, the studio sequence is calibrated to accommodate the diversity of backgrounds of the incoming students in a tight shared core that steadily transitions into an open field of options for advanced work. In the first semester (**A4001 Core Studio I**, under the direction of Professor Galia Solomonoff), all M.Arch students share the same program and all teachers work as a team. While students are allocated a primary teacher, there are many all class meetings and teachers act as jurors for their colleagues. In the second semester (**A4002 Core Studio II**, under the direction of Professor Amale Andraos), each teacher gives the shared program a different emphasis, with students selecting the teacher. In order to foster an engaging and supportive studio culture from the beginning of First Year, Third Year mentors act as student advisors and informal critics to First Year studio projects. This form of peer mentorship strengthens the collegial spirit of the school and is one of the vehicles through which assimilated experience and knowledge is communicated between generations. In the third semester (the last of the core, **A4003 Core Studio III**, under the direction of Professor Hilary Sample) the students work in pairs on an assigned urban housing project. In this way, there is a gradual transition from the shared core to the more individual experiments in the advanced studios. The first of the advanced studios in the fourth semester (**A4004 Advanced Studio IV**) act as the transition by typically focusing on a complex building with a unique set of programmatic, site and client needs and engaging in design research questions in the areas of technology, software, materials, fabrication, etc. In the final two semesters, the M.Arch. students work alongside the post-professional students, selecting their studio option from around 18 different studios ranging in size from six or seven to 12 or 13 students. The collaborative nature of

studio culture means great transfer of knowledge from the experienced professionals to the newcomers but also from the newcomers to the professionals. By the last semester it is no longer so easy to detect the difference between M.Arch students with an architectural background and those without, and between the M.Arch and AAD candidates.

In parallel to the evolution from core studios to advanced, the sites for the studios evolve from New York City and the metropolitan area in the first semesters to the regional to the global, with every student travelling internationally with their design critic in the final semester. New York City is the key laboratory for the Program in which basic skills are developed in the early semesters and a series of cities around the world act as the laboratories for the most advanced work in the last semesters. The studio culture insists on the crucial importance of local specificity within a globally interconnected world. The past decade and the context of glorbalization has often made the Core Studios and the New York City region more rather then less important. Studios in this context examine sites in Manhattan as distinctly different and unique in its relation to globalization and economic changes worldwide. In this way New York City has continued as a focus of the Core Studios but has also been dramatically redefined and the school has considered this a tremendously exciting aspect of our work. A very wide range of nationalities in the Program has been also very beneficial and has fostered a continuous exchange of different skills and outlooks that reflect back on New York City but also on Columbia University as a whole. The GSAPP focus on cities has become a centrally important facet of the wider University as we refine our mission in this new realm. Combined with the wide range of global sites for the educational experience, such as the Studio X network, urban life and the cosmopolitan quality of the city become both a central value of the program, and a vital quality of the studio culture itself.

Students at GSAPP aim to produce work that as a body of design solutions, research, workflow, collaborative methodologies, and urban knowledge is at the forefront of architectural discourse, both academically and professionally. Thus, studio culture nurtures various avenues through which student work can be displayed, discussed and built upon by subsequent studios. One such avenue, for example, the *End-Of-Year Show*, assures that all students and faculty are aware of all the design work going on in the School. The work of every student in the School is displayed at the end-of-year show—even if work on studio projects continues on after reviews to address jury concerns. In recent years, the end-of-year show has been archived and published as an interactive website. In addition to this, each teacher selects the three or four best students in their studio to be published in *Abstract*, the annual survey of the School that is distributed to both students and alumni.

The parallel publication of work on the School website and various class blogs presents a very public archive of each year's studio work. In addition, studio work is frequently selected for exhibition (as at the Center for Architecture in New York, and the Studio-X galleries in Beijing, Rio, Mumbai, Johannesburg, etc) and is regularly featured in a wide array of national and international magazines. Often, visual studies courses also produce work that is exhibited in both local and international venues as in Caterina Tiazzoldi's course (**A4795 Social Cave: Milan Furniture Fair**), which produced an interactive installation for the Milan Furniture Fair in Italy and Alistair Gill and Veronika Schmid's course on advanced 3D printing technologies and techniques (**A6145 Saturated Models**), which exhibited at New York's ICFF. Furthermore, after a few years of exploring a theme with different groups of students, faculty will often prepare a book or formal article documenting the students' work and the progress of the thinking during this teaching.

These different forms of public display of studio work, in combination with the experience of final and mid-term juries, the comprehensive reviews of student portfolios, and the final review of the students' entire portfolios of all design work in the Program prior to graduation, offer the

studio faculty a chance to review and discuss the success of the curriculum. This feedback is used to refine the curriculum, adjust the requirements, adjust the teaching line-up, schedule etc. The teams of design teachers in the first three core studios all meet with the coordinator of the studio before the semester begins to go over the revised curriculum, share feedback and agree on the objectives, schedule and collective responsibilities the upcoming studio.

The offerings in advanced studios are constantly adjusted so that the most successful work of a previous semester can be developed with the greatest momentum. Studios offer a wide range of programs and approaches with faculty and students working closely together. This diversity and evolution of studio offerings is central to the School's pedagogical approach. This diversity has increased since 2006 and the school supports smaller studios (minimum of 6 students and maximum of 13) as part of an expanding effort to introduce themes, issues and techniques that are expected to flourish though they maybe new to the curriculum. The goal of diversity is abetted by an investment in new ideas and studios; these are, however, expected to mature. In this way, studios devoted to landscape, sustainability, interactive technology, fabrication, building envelopes, etc. have steadily grown from small specialized advanced studios to major themes of investigation that preoccupy many studios and classes and get increasingly integrated into the core curriculum.

The kind of feedback offered students each week by a dedicated studio teacher is supplemented by the feedback offered by other teachers in the School in intermediate and mid-term reviews, by teachers from other schools in the final reviews, and finally by an international audience responding to electronic and traditional publications. Core Studios reviews are organized in a round-robin fashion; each of the eight studio critics attend each other's reviews over the course of each major review. Advanced Studios benefit from the deep well of architectural talent in New York City; this includes access to both professionals at the level of principals but also project architects and recent graduates from peer schools. Project architects have become more sought after in an era when the profession is changing; they bring a level of awareness and depth on issues such as integration with engineering, consultants, and construction supervision. Studios at the school have long focused on real sites and programs but with the arrival of Building Informaton Management and other new forms of software for collaboration the school has sought guest critics that can address this as real and still emerging issue.

The atmosphere in the studios and in reviews is that of supportive criticism, the rigorous testing of each proposal on a wide range of criteria with a basic respect and admiration for the emerging skills and contributions of the student preparing to enter the international profession. Constant feedback is solicited from students and faculty to make sure that each studio is maintaining the highest standards in all aspects of academic and personal well being of students and teachers. Teacher evaluations are encouraged at the end of every class and studio. The Director of Core Studios, Prof. Michael Bell, and the Director of Advanced Studios, Prof. Laurie Hawkinson, stay in constant touch with all studio faculty. If students feel that their studio teacher is not consistently maintaining a clarity of expectation, time commitment, or supportive feedback to individual students or the class as a whole, they are encouraged to bring the issue to their Program Council representative who will then raise the issue on their behalf to the Director or coordinator of that particular group of studios or directly to the Dean and Associate Dean of the School. Such matters are treated as confidential by both Program Council and the Dean's office. After determining the nature of the issue and the best course of action to successfully address the problem with the minimum of interference, the appropriate level of confidentiality is also determined. Students are also encouraged to come directly to the Dean or Associate Dean with

any concern. All students are informed at the beginning of each year of the open door policy on the 400 level (School Administration) and almost all students take advantage of this open access at some point. The Administration is committed to solving problems on the day they are raised. Any student dissatisfaction is taken very seriously as the strength of the Program derives from bringing together partnerships of students and teachers to collaborate on the highest level of design work. Suggestions by individual students, groups of students, or by their representatives have a very direct influence on studio offerings, classes, electives, and visiting lecturers.

This responsiveness to student concerns is understood to reinforce one of the crucial pedagogical principles of the studio culture that each teacher offers not only a different design program, with a particular philosophical or technical approach, but also a different teaching method. While Core Studios are more consistent in studio methods and protocols, Advanced Studies have a less standardized approach to assignments, feedback technique, representational techniques, teaching schedule, balance of group and individual critiques.The School seeks to maximize the amount of mutual respect and enthusiasm in each individual studio. The teaching pattern—allocations of time per day and week, as well as per student— is very standardized in the Core Studios (with a consistent pattern of teaching, and no teaching assistants). This allows a close relationship to be maintained between an individual teacher and each student throughout the semester. Likewise there are common requirements for presentation and completion of work, though there is a great deal of individual responses to both the nature of presentation and additional materials and techniques. In the second and third semesters, the different approaches of the studio teachers are identified to help the students choose in the lottery. This steadily gives way to a ever wider range of different patterns in the Advanced Studios. With the addition of around the same number students from the MsAAD degree, at the onset of the final year of the M.Arch program, the lottery for the Advanced Studios expands to an average of 18 different studios. Each teacher must explain their teaching method, rhythm, assistants, and expectations in the studio lottery so that students are able to make informed choices about studio options. During each semester, one or two studios may need some minor guidance from the Director of the Core Studios, the Director of the Advanced Studios, or the Dean's office, but in general the teachers and students establish a close and mutually rewarding working relationship. While GSAPP is proud to have the reputation for supporting young teachers before they rise to play leadership roles in the discipline, many of them continue to teach at the School after they have established successful practices. As a result the School is able to provide a balanced range of teachers, taking advantage of both the freshest ideas of an emerging generation and the great experience of senior professionals. To this end, the newly initiated Professor in Practice track reinforces GSAPP's dedication to the development of measured innovation and creative invention in an evolving discipline.

Social Equity

Columbia University has established policies and procedures related to harassment and discrimination. There are multiple channels available for students to resolve issues of harassment and or discrimination. These include University OMBUDS Office, which offers confidential, impartial, and independent advice and mediation. Another option for students is Dean's Discipline within the Dean of Students Office. Many grievances are resolved through these two channels. Occasionally an issue is brought before the Office of Students for Gender-Based and Sexual Misconduct or the Office of Equal Opportunity and Affirmative Action (EOAA). The EOAA office is responsible for managing Columbia University's Student Policies and

Procedures on Discrimination and Harassment and for coordinating compliance activities under these policies and the applicable federal, state and local laws. It has been designated as the University's Compliance Office for Title IX, Section 503 of the Rehabilitation Act, and other equal opportunity, nondiscrimination and affirmative action laws (http://eoaa.columbia.edu/). Students, faculty, and staff may contact the EOAA Office to inquire about their rights under University policies, request assistance, seek information about filing a complaint, or report conduct or behavior that may violate these policies.

The text of all relevant policies and other documents will be provided in the Team Room and can be accessed through the School's online bulletin (http://www.arch.columbia.edu/school/thebulletin/complaint-resolution-options).
GSAPP's Dean of Students (Danielle Smoller), Dean of Administration (David Hinkle), and Dean of Finance (Janet Reyes) are collectively versed in these policies and participate in the appropriate hearings or other processes as appropriate or required. GSAPP has it's own established policies for academic integrity such as cheating or plagiarism. Cases of this nature are managed at the School level. The policy will be provided in the Team Room and can be accessed in our online Bulletin (http://www.arch.columbia.edu/tags/plagiarism).

GSAPP is deeply committed to diversity amongst its student body, faculty and staff. This major committment is a key part of long term planning and there is a dedicated plan devoted to it. Faculty and student diversity issues are discussed in this document under Human Resources.

I.1.3. Responses to the Five Perspectives

Architectural Education and the Academic Community

GSAPP takes a major part of its identify and mission from being embedded in the wider academic community of the University. From the School's founding there has always been a very large number of leading architectural scholars on the faculty that are all expected to play a global leadership role in their original research and play a leadership role in the University. All have degrees in architectural design and are expected to bring the insights of the highest levels of academic thinking to the design studios. As a professional school within a major research University, GSAPP is dedicated to enriching architectural design through the highest level of scholarship and applied research and equally to enrich the University through the highest level of design culture. Architectural design itself is considered an important and demanding form of research and the architect's unique ability to synthesize competing multi-dimensional factors is considered to be a model of the kind of thinking that increasingly defines the most advanced work in the leading disciplines within the University. In recent years, for example, different parts of the University have learned from the architectural studio model to transform their own curricula. In reverse, scholars from around the University are active within GSAPP in events, courses, workshops, studios and extended research projects. All parts of the M.Arch program are designed are designed to take advantage of the way the School is embedded in the University and to prepare its graduates to operate with confidence and leadership assets in fields outside architecture. The Ph.D. program in architectural history and theory builds on this strong foundation of the Masters program in the research culture of the wider University and offers the highest level of academic training with the young scholars in training (graduates of professional architecture programs) actively engaged in all areas of the teaching curriculum. The Critical, Curatorial and Conceptual Studies program offers architectural graduates the opportunity to more deeply connect their design training to the worlds of architectural exhibition, publication and criticism. The school also has an events program of an unprecedented intensity that gathers scholars from all around the world to focus their thoughts through lectures, workshops, symposia and conferences. The majority of these events are also streamed live to an international audience of students, academics and practitioners and are available on-line for the wider community. Many of these events culminate in the publication of books. The publications program also produces translations of key architectural texts, and catalogs of exhibitions. In addition, the school publishes a several academic journals. The public exhibition program in the Arthur Ross Architecture Gallery, the series of display spaces on three levels of Avery Hall, the display spaces in the Studio-X Global Network, and travelling exhibits in sister institutions around the world provide another key venue for academic exchange and is treated as an advanced research program in its own right. This spirit of deep academic engagement is captured by the fact that the revered Avery Library, the reference library for the international field, is literally at the heart of the school. Strong bridges are maintained with other parts of the research University with joint studios with the School of Engineering faculty and students, School of Journalism faculty and students, etc. Faculty from around the University participate in design studios, major research projects, Ph.D. committees and advisory boards. A major new research center is currently being established by GSAPP to galvanize the best collaborative work on the future of cities by all departments of the University. Many of the School's faculty play key roles in other schools (search committees, Ph.D. and Master's thesis committees, research collaborations, boards of research centers, scholarship committees, etc) and on key University committees (tenure

committees, committee for global thought, diversity initiatives, faculty life, Graduate School Ph.D Committee, etc) and as the School's representatives on the University Senate. The Dean plays an active role in the central administration of the University on all academic and administrative issues, through direct work with all the leaders of the administration, the Dean's Council that advises the Provost, and with a key role in acting as the President's advisor on all new buildings for the campus, and major renovations, working closely on the selection of architects, the design process, and mediating between University and architects during construction.

Architectural Education and Students

The core strength of the School and the heart of the educational experience for the students is the studio culture: vibrant, intense, continuous, collaborative, multi-dimensional, experimental, cosmopolitan, and international. Student to student exchanges are as vital to this culture as student to teacher exchanges. The steady transition from core training to advanced experimentation, and the sense that core training never stops and overlaps with the latest experiments reinforces the sense that the profession of architecture is one of continuous and collaborative learning that forever combines tradition with new thinking. With this core perspective, the School is dedicated to preparing the next generation of architects for life and work in the complex global world. Indeed the global context is central to the school's mission. The students come from more than 50 different countries, they all travel internationally with their faculty for engaged design studios, and the school has a global network of research facilities to sustain a global think tank on the future of cities that acts as the platform for teaching, research and the exchange of ideas. Summer international workshops with faculty (China, Brazil, Japan, Italy, Jordan, Turkey, Finland, etc) offer additional opportunities for students to gain international experience. The dense event series brings a continuous stream of designers, scholars, engineers, consultants, and artists from all around the world to the students. Many of the school's research labs (like China Megacities Lab, Global Africa Lab, Latin Lab, Headquarters for Japanese Architecture, etc) are devoted to the engaged study of particular regions and support studios, seminars, events, visiting scholars/designers, and publications. Major symposia and exhibitions are often organized on specific regions of the world and the school continuously collaborates on symposia and exhibits in other countries. In this way, students not only appreciate and respect global diversity but understand that architects must not only respond sensitively and intelligently to regional, cultural and environmental diversity but that architecture has a key role to play in nurturing and sustaining diversity itself as a crucial dimension of a biodiverse world.

Young architects at the School are trained to become leaders, not only within the profession, but within society with the profession itself framed as a leader in the formation of the physical and intellectual fabric of cities. The school is dedicated to the idea that architecture is a collaborative endeavor but also to the individual leadership of each student. The experimental culture of the school emphatically rejects the dominance of any one architectural position, embracing a diversity of perspectives and the sense that the discipline is constantly in evolution, continuously drawing on centuries of tradition while actively responding to new thinking, new technologies, and new environmental and global conditions. Rather than receive readymade positions from the faculty, students collaborate with the faculty on the evolution of the discipline. The decision by students to come to the school is understand as a desire to play a leadership role in some aspect of the field and the school is organized to respect and facilitate this desire. Students have very high expectations of faculty and vice versa. Students are asked to help

extend the field and faculty exemplify the spirit of life-long learning to the students through their openness and enthusiasm for investigating, refining and rethinking all aspects of the field. A key dimension of this dedication to the intersection between the highest quality of training in the best practices of the field and the highest quality of investigation of the best practices of the future is that students are made continuously aware of the extremely wide range of possible modes of professional practice and are supported in the individual paths they choose. The goal in all aspects of the school is to incubate a sense of the architect as a key professional with a unique set of skills and a unique and crucial leadership role to play in the overall health of a global society in a shared planet with limited resources.

Architectural Education and the Regulatory Environment

Almost all of the graduates of the M.Arch. Program go directly into practice, and a high percentage of them become registered architects. A significant percentage of GSAPP graduates go into professional practice in countries other then the United States: this has given a significant incentive to substantiate our presence in some of students' home countries and the Studio X network is seen as important in helping the school anticipate where our students will work. That will in the future include a deeper awareness of the regulatory environment in those countries but also how we learn from cities and zones of the world where change is happening in ways that will guide change here in the United States. Given the complexity of practice today, particularly in the urban environments in which Columbia is most interested, the GSAPP encourages a synthetic approach to design that recognizes the importance of technical requirements, issues of public health, safety and welfare, as well as human, historical, and environmental contexts. Each of these areas receives separate attention (technical and health and safety issues are covered, for example, in the building technologies sequence) but none of these areas can be conceived totally in isolation. The School emphasizes a rounded view of the architectural professional who responsibly and actively combines a wide array of skills to address important practical and social needs.

A required Professional Practice course specifically addresses the societal roles and responsibilities of architects, as well as issues of IDP, professional registration, and continuing education. There is substantial discussion in the course and its required textbook about the ethical and moral issues of practice. Moreover, within the curriculum there is also discussion of potential constructive and rewarding vocational and avocational uses of the architectural education in other areas of the construction and real estate fields, as well as more general societal uses.

The course is taught by a past President of the AIA/New York Chapter and of the Center for Architecture Foundation and helps the School to maintain close links with the New York Chapter. The Presidents of the local AIA chapter (like the incoming one and one of two years ago) are often graduates of the program, along with key members of the Board of Directors, including the ongoing Executive Director of the chapter. Columbia graduates constitute a large proportion of the chapter's membership. This creates a rich context for exchange between School and Profession and these exchanges have multiplied in number and intensity in recent years.

The regulatory environment of architectural practice is increasingly in the forefront of much of the advanced work and debate in the school. The major ongoing research programs dedicated to the evolution of materials/engineering, the building industry, and global practice, for

example, support lectures, design studios, workshops, symposia and publications that continually address the evolving responsibilities of the architect.

In recent years there has been a growing effort at GSAPP to identify and cultivate a heightened sensitivity to the ethical responsibilities of the professional architect. This includes symposia at the School on the theme, special lecture series, individual visiting lectures, and seminars. Design studios are often the pedagogical site for confronting and cultivating professional ethics through a commitment to social justice. The depth of engagement with the global context of architectural practice in all area of the school is understood as a matter of professional and ethical responsibility. Furthermore, the wide-ranging concern with sustainability in the School is seen as an ethical as much as technical issue.

A link to the NCARB site is placed on the School's website alongside the links to other key professional organizations and procedures. A regular lecture, given by both the NCARB representative and the head of NYS Architectural Licensing, is held for the students, to inform them of current national and NYS IDP and licensing issues. Students are encouraged to sign up early for IDP, and are guided through the process. Most of our faculty also practice in the city and regularly advise our students on an informal basis.

Architectural Education and the Profession

Given the school's central mission to act as both an international leadership program in exemplary professional training and an international leadership laboratory for refining and expanding the architect's capacity to act creatively, responsibly and professionally in a rapidly evolving global world, every aspect of the school is dedicated to the strength of the architectural profession. All students aspire to a professional career and the ability to lead within the profession. Almost all the architecture faculty (both scholars and designers) are trained architects and all the design teachers have their own professional offices, and bring the reality of the profession to every studio and seminar class they teach. The location of the school within New York City, with arguably the highest density of practicing architects than any other city of the world, is crucial to the identity and teaching environment of the school. During design review weeks, for example, there is literally around 150 or more practicing architects responding to the student work. Likewise, at key points of the curriculum a team of engineers occupy the school to give feedback to individual students on their designs but also an understanding of the role of consultants in the architectural profession. A wide range of such consultants attend the mid and final reviews to again give a sense of the multiple overlapping professional responsibilities in any one project. The dense event program brings professionals from around the world to give a sense of both the specificity of professional practice in different regions and the unique challenges faced by global architects practicing in multiple regions at the same time. Likewise when all the students travel around the world with their teachers doing engaged studios, local professionals become key advisers and are often brought to Columbia for mid and final reviews. Many of the teaching assistants in studios, and visual studies workshops are young professionals who are either in larger offices or have recently launched their own offices, giving the current students invaluable insights and advice on the early years of professional life. Likewise, the events program is widely attended by professional architects in the city from the most junior to the most senior. Their presence and questions provide another key layer of insight into the profession for the current students. Many events in the School, like the series of major conferences on the future of the building industry, become essentially professional conferences. Practicing architects from around

the world often ask to spend a semester at the school as visiting scholars in order to reflect on their work and this provides yet another kind of knowledge and inspiration to the students. All of these overlapping dimensions of engagement with the profession provide the students with a rich understanding of the responsibilities, complexities and opportunities of the profession.

GSAPP has a strong commitment to educating all its students in making concrete connections to the profession of architecture and in its ability to serve the needs of today's diverse society. This includes a commitment to advancing the knowledge of the art and science of architecture, education on the complex processes for buildings and sites, a recognition of ethical responsibilities and respect for our legal framework, and an awareness of the social and environmental impacts of building and planning—all with a respect for the dignity of others.

This is achieved through teaching and engagement with distinguished professionals on the faculty and through direct working contact with professionals in the field. Often, the subject matter of a studio or seminar is selected for its timeliness and potential engagement with city processes in order to draw in distinguished experts and professionals in the field. GSAPP has a diverse faculty of approximately 175 full-time and adjunct professionals who practice in New York City and internationally. Beyond their own courses, faculty members participate in reviews, symposia, and colloquia, and serve as resources for individual student projects.

Regular coursework is reinforced by classes given by visiting professionals in a range of fields and is supplemented by lunchtime or evening lectures, and increasingly by evening, day-long, or week-long symposia devoted to discussion of the state-of-the-art practice in various fields. The key series of annual multi-day symposia on the state of major building materials; "The Columbia Conference on Architecture, Engineering and Materials" for example, feature around 40 or more allied professionals exploring the state of the art in practice as seen through a lens of advanced materials science. These conferences have each lead to a book and video documentary published with our partners at Princeton Architectural Press. Many of the lectures, panels, and exhibitions every semester are aimed at the evolving conditions of architectural practice, including new programs, techniques, partnerships, etc. The School is engaged in exploring best practices and possible future forms of practices across the full range of professional practice from one person offices through to the largest corporate offices. In a multi-year collaboration with KPF, for example, GSAPP is devoted to researching the operation of corporate offices in the global environment, bringing students into direct engagement with clients, consultants and government and decision making in global sites. But equally the school studies the way recent graduates are now setting up offices based on collaborative software platforms that enable architects in different cities and with different skills to form successful practices.

The key role of consultants in professional practice is a major theme of teaching. A key moment in the M.Arch. Program is the studio day in which an array of top engineers from the city occupy every corner of the building, offering their services to analyze the projects of every first year student. In **A4003 Core Studio III** Housing studio, a presentation followed by a round table discussion that focuses on structures, life safety and lighting for housing is led by renowned engineers from offices such as Ove Arup. Later in the term a team of engineers visits each studio giving individual desk crits to partnered students before the mid- and final reviews. In this stimulating exchange, crucial lessons are learned not only about structures but about the overlapping and collaborating professions in the field. The fact that leading lighting, structural, and environmental consultants are teaching the technical classes as well as advanced electives means that this same level of creativity and professionalism works across the whole curriculum. GSAPP tries to locate the architect in a wider spectrum of allied design consultants ranging from landscape, interior, industrial, structural, environmental, lighting, acoustic, and graphic design

professionals, while fostering the collaborative partnerships on which the field is organized. Consultants are increasingly involved in studio teaching, making presentations, and reviewing work. The 30 student Columbia Building Intelligence Project (C-BIP) studio in the fourth semester, for example, works on the new modes of work in the BIM environment with the active involvement environmental consultants throughout and the juries feature leading engineers from a variety of fields. The series of seven associated C-BIP international think-tanks have brought together around 100 professionals from all aspects of the building industry in order to understand more the responsibilities and opportunities of the professional architect in the face of the latest material, software, collaborative and legal environments.

GSAPP maintains close ties with all the city agencies that play a key role in the work of professional architects, like City Planning, Department of Design and Construction, EDC, etc. GSAPP has developed a close relationship with the Center for Architecture run by the New York chapter of the AIA, which has brought students into closer contact with the profession and given practitioners a chance to offer feedback and advice to faculty and sFtudents. Faculty and students are often exhibiting at the Center, giving talks, or appearing on panels, discussing key issues facing the field and developments in architectural education.

Architectural Education and the Public Good

The school is emphatically dedicated to the unique responsibility and opportunity derived from the architecture's status as a fundamentally social art with the public good as its central goal. This social core is reinforced through a history/theory curriculum premised on the concept of architecture embedded in society and a design curriculum based on engaging the students in real world design contexts with a complex mix of stakeholders. Technical and environmental questions are treated as part of this wider sense of social responsibility. Sustainability, for example, is understood as simultaneously a social and a technical issue, a matter of both ethical responsibility and technological intelligence. In a wider sense, all technological dimensions of architecture are understood in a social context, as matters of social and professional responsibility and central opportunities for creative intelligence. Having the architecture program surrounded by and overlapping with programs in urban planning, urban design, historic preservation and real estate development deepens this sense of architecture's social responsibility and professional commitment to a complex ecosystem of social forces. The urban planning and urban design programs have a particularly strong commitment to social justice that has a strong impact on the architecture program and the historic preservation program is dedicated to the question of shared memory as a key dimension of the public good. The social core of the curriculum extends to all key aspects of the wider school. Most of the scholars in the school do their major research work on the intersection of the built and social environment and engage publically with these issues.

GSAPP faculty, administration and its curriculum lead in ways that encourage all students to think of the professional architect as an active civic leader, addressing key practical and professional necessities while also helping communities realize their highest ambitions. Few design studios at GSAPP are not based in a larger urban and social imperative and the present and future needs of citizens are central to work at the school. As an institution based in New York City, GSAPP has long focused its studio goals primarily on urban sites, but the past decade and the evolution and growth of cities worldwide has meant that these issues are now often best seen through the lens of other cities. In the context of global cities but also a urbanizing world the

school frequently sees its New York City base in a context of need and social change that is learned from other cities and their unique circumstances. GSAPP strives to address issues of social and political responsibility in architecture throughout the curriculum. Design studios, seminars and courses have all been both changed and enhanced by the affects of globalization but we are also concerned with the specifics of each city and its local qualities. The architect is positioned as the key professional who must reconcile an extremely wide range of competing demands at different scales from the immediate requests of clients, through those of users, visitors, community, city and future generations, and has the expertise to find a synthesis of these needs that maximizes the public good over a long time frame.

The sense of commitment to the public good is pervasive through the school. It is firmly established in the core curriculum in terms of design studio sequence (sites, programs, community and government interaction, visiting speakers, etc), the core history/theory sequence (social framework or required lectures), the technology classes, professional practice classes etc. It is then expanded throughout the advanced classes, the array of public programming, the advanced research culture, public exhibitions, publications, interdisciplinary collaborations, deep engagement with New York City and with the global context of architectural practice.

Integration of the Five Perspectives

The five perspectives resonate strongly with the core values of GSAPP, are integrated into all levels of the program and guide short, medium and long term decision making. The central pedagogical philosophy at GSAPP is a deeply holistic approach in which each key element and focus of the curriculum is strongly established in the core required classes then expanded out through the advanced classes, electives, research units, workshops, events, and publications. More detail of the final perspective of Architectural Education and the Public Good (which could seen as the overaching frame of reference to the first four) to is offered here with examples to show how the perspectives radiate out through the program in this holistic way.

The centrality of the public good is established in the core studio sequence. Each of the design studios seeks to carefully define the public (both civic and governmental) nature of design with particular attention to change in New York City and the complexity and diversity of the city's constituencies. The Core Studios in particular address this with work that is based in three distinct zones of the city and that is affected by diverse historical and new pressures. Core Studio I led by Professor Galia Solomonoff has been based in the Morningside Heights and Manhattanville area of Manhattan (after earlier being in lower Manhattan). The studio program addresses Columbia University's presence in the area and in bringing new graduate students in the program it also instantly asks them to consider their own institution's role in the city. The Core I program has required students to design a new Columbia owned and operated Environmental Laboratory and requires that students imagine how the program interacts with its immediate neighbors but also how it engage both the immediate and historic city with an emerging and science and politics of the environment. Students are asked to address how the design of the building can act as a public asset and improve Columbia's relationship to Harlem, to Morningside Heights and in the case of lower Manhattan to explore how Columbia could decentralize its presence in the city in a way that reinforces shared community values. Similarly Core Studio II has taken on programming that is by necessity written by the students. In recent years, Core Studio II required students to design a Museum in which a significant part of the collection and exhibition program was to be determined by the museum's site and its intended audience and community. Museums hold a prominent cultural role in New York City and the program asked that the historical expectations

that these institutions are inevitable be questioned and re-invented. Key to the studio culture is an idea that programs are written, that is, created and as such can be explored as creatively and with as much desire for renewal as building form, tectonics or materials and experience. The shaping and analysis of the brief is seen as a key factor in shaping architecture's public role objectives and strategies in a continuous feedback loop.

Recently **A4002 Core Studio II** has been re-written by Professor Amale Andraos to focus on a renewal of the architectural and programmatic type of the local or branch bank. In the wake of the banking and liquidity crisis and the wider prospects of global finance the students were asked to re-imagine the branch bank's relation to its immediate neighborhood, and to rethink its possibilities in serving local communities. Mining a long history of changing banking models enlisting architecture to represent a new financial world - from the fortress-like beacons of financial stability that pervaded the 19th century, to the recent proliferation of heavily branded suburban bank retail "experiences"—students investigated how national and global banks have affected local neighborhoods in recent decades. In the current climate of consumer mistrust of the financial industry, **A4002 Core Studio II** asked students to conceive a new bank typology for a site on the Lower East Side, building on its past both as the heart of Gilded Age New York—the Ladies Mile—and history of deep activism. Using small credit unions and local micro lending initiatives as inspiration, students set out to design a bank that better serves the public good by functioning more like a community resource center, providing traditional banking services as well as a strong education mission in how to manage personal finances. The students were also required to hybridize the banking program and integrate within it other community based programs such as local markets, technological incubators or artists' studios, supporting and investing in the local community's economic and creative power. Projects such as **A4002 Core Studio II** "Slow Bank" program train students to see their responsibility to the public good as an inextricable part of successful design, and to understand that this engagement and civic commitment is also always the most effective means of approaching a project: analyzing its brief, gathering information and feedback from stakeholders, collaborating with allied professionals, and communicating the overall contribution of their work in order to produce meaningful architecture.

This commitment culminates in the third semester **A4003 Core Studio III**, or what is known as the Housing Studio, which requires students to complete a large scale housing project to support a diverse community. The studio as run by Professor Hilary Sample has focused on sites in The Harlems with specific student project situated in East Harlem. In 2011, the studio worked in proximity to Marcus Garvey Park and the Metronorth elevated train line; in 2012 the studio site is slated for development as part of Mayor Bloomberg's New Housing Marketplace Plan and is adjacent to the East River in East Harlem. While the two sites are only a mile apart, the historical make up and contemporary social aspects of the sites are vastly different—the rates of change and the overall way these communities frame their histories and futures are very different. Professor Sample has a particular focus on issues of public health and her own research on the intersection between health, architecture, and maintenance does affect the studio by asking students to examine how health and housing design relate historically as well as today and how a studios specific site and local conditions revise that history. New York City's historic work on issues of tenement housing, access to light and air as well as life safety all are here revisited and both the political and medical as well as urban questions are addressed in architectural design. Professor Michael Bell directed this studio for 11 years prior and the studios sites were at times sited outside of Manhattan and based in larger scale urban as well as architectural design. A studio sited at the Hoboken Rail Yards explored the design of new housing atop a major transit hub in part as a response to rising energy costs for commuting but also to

take advantage of underdeveloped infrastructure; another studio focused on similar issues in Hunter's Point, Queens and Journal Square/ Jersey City. The studios had worked closely as well with redeveloping sites owned by the New York City Housing Authority and within Bloomberg Administration re-zoning or Up-Zoning sites where populations of people were facing new demands on development and land values were adding stress to community tenure in areas such as Clinton (Hell's Kitchen), The Far West Side and The Bowery. A key aspect of Core Studio III is direct engagement with New York City government but also the history of housing in a city where the role of government has been immense. One in twelve NYC residents, for example, live in Public Housing and a great deal of new development in the city is often done through public/private partnerships in which public lands incentivize and ideally improve private development. Housing issues are by nature local and the studios address local constituency needs but the studio also has explored the deep effects of new financial mechanisms in the city such as public / private development but also the often socially complex issues of public housing and how a city programs housing for those in financial need. But with advances in issues of public health science and study, and environmental technology and sustainability the studios also now explore how social issues from one era are altered and hopefully improved by new direction and capability.

Other studios lead students in other areas of architecture's responsibility to the public good. Most of the School's work on sustainability, for example, understands the intelligent use of limited resources as a key social commitment. The major C-BIP studio in the fourth semester, for example, focuses on the question of energy, asking 30 students to use the latest computation techniques to work collaboratively on design elements that can be used to assist the retrofitting of New York City's existing building stock to meet the sustainability goals of the 2030. Likewise, the Urban Ecology Studio taught by Professors Richard Plunz (GSAPP) and Patricia Culligan (Civil Engineering) in the fifth semester incorporates IGERT PHD students from engineering and urban planning to focus interdisciplinary expertise on emerging issues of ecology in ways that are re-writing how cities are seen today in relation to the natural environment understood as an invaluable public asset. This work builds on the awareness already created by having the Core Studio I focus on the question of Environment through the design of a small lab and monitoring station for New York City. With this sequence of studios, the scale rises from small, to medium to large scale, in a way that is designed to prepare students for not only the larger scale but also to see issues of social welfare, society and equity, community and development as not intractably opposed but capable of change and evolution. This work is then extended through the research labs, like the Urban Design Lab, the Urban Landscape Lab and the new Eco-Lab.

A crucial way, in which the School commits students to the public good, is by having a large number of visiting speakers, jurors, etc that are representatives of public agencies, public institutions, community groups etc. The core studios, for example, bring innovative leaders from government. Professors Sample and Bell have invite officials from government to help form studio programs or give all studio lectures. David Burney, Commissioner, Department of Design and Construction, City of New York, and previously chief administrator for the New York City Housing Authority, for example, has spoken regularly in Core Studios and helped shape **A4002 Core Studio III** programming. He has spoken on the potential for innovation in programs from housing to a new 911 Data Center but also in how government commissions and manages the built environment. During the fall of 2011, Professor Sample established a three year study of East Harlem to be completed in the Fall of 2013. To bridge the gap between health and housing the studio hosted the Harlem Community Development Corporation working with its Director Curtis Archer and Wayne Benjamin, both Columbia graduates. In addition, Professor Mindy Fullilove

from Columbia's Mailman School of Public Health participated in a presentation about urban stress and the built environment. In 2012, Professor Sample shall host Elyzabeth Gaumer (Director, Housing Policy Research and Program Evaluation) for the NYC Department of Housing Preservation and Development (HPD) to speak with the faculty and students. Ms. Gaumer directs the Division of Energy Management, Department Of Citywide Administrative Services and is a Policy Advisor in the New York City Mayor's Office. She is also a Senior Policy Advisor for the Mayor's Office of Long Term Sustainability. Guests at the school from the Department of Design and Construction as well as developers of supportive housing and new models of low income and poverty housing are increasingly supported by the Mayor's administration and planning departments and the landscape of public/private partnerships is a major theme at the school. Professor Sample is further expanding the intersection between architecture, health, and housing by hosting a presentation and round table discussion with Ms. Gaumer, Dr. Karen Lee, the Health Department's Deputy Director for Chronic Disease Prevention and Control, and Dr. David Rosner, Ronald H. Lauterstein Professor of Sociomedical Sciences.

Similarly, the Columbia Building Intelligence Project (C-BIP) has aggressively sought outside advice from government and industry: speakers in C-BIP studios and open conferences have included: Laurie Kerr, Senior Policy Advisor, Mayor's Office of Long Term Sustainability, City of New York; Hilary Beber, Policy Advisor in the New York City Mayor's Office; and Melissa Wright-Ellis, Chief Of Staff, Division Of Energy Management, Department Of Citywide Administrative Services. Few studios do not invite participation from industry, government and community and in all cases the school hopes to use its academic setting to further innovation in how the groups interact and abet innovation.

GSAPP seeks not only to inform itself and its students about the latest developments in public decision making but to offer its resources to assist the process. During the last year, for example, the school hosted the annual Mayor's Institute on City Design multi-day conference where a group of Mayors from around the country had the opportunity to privately discuss their key initiatives and dilemmas with feedback from a team of GSAPP faculty and experts from fields devoted to the built environment. Over the last three years the Buell Center for the Study of American Architecture has devoted itself to the theme of the "public" through an extended series of lectures, studios, workshops, research reports and design commissions culminating in the "Foreclosed" exhibition at the Museum of Modern Art. The school is committed to the view that the work within the school, especially within the design studios, should engage directly with the world outside the school, and directly stimulate the kind of multi-dimensional debate needed to make an impact on that world.

Students are encouraged to understand that such impact requires architects to work together with allied professionals not only in the studio but on a public stage. Professor Laurie Hawkinson working with Professor Vishaan Chakrabarti (Director of the MSRED program), for example, have worked in a joint Architecture and Real Estate Development Studio to explore the future of Lower Manhattan and Governor's Island. Together students and faculty realized a studio of works that attempted to fuse parameters of finance, FAR, and urban design with recognition of the history of communities and business uses that have long defined Downtown. These sites—all made newly important under the Bloomberg Administration, are studied using an array of resources available both at the GSAPP and through city resources, demographic information available through the school's GIS database. Background and field information from developers and housing advocate groups in the city become newly malleable and potentials for development do not pitch real estate and investment in an automatic battle with community and social needs.

The works of the students in this studio have been the subject of much interest and debate in the media.

GSAPP studios also make use of the school's expertise in computing and software not just as techniques of design, representation, analysis, fabrication and communication but also to create potentials to revise how we see our social role and our capacity to improve the build world for the widest possible community. Data visualization has increasingly become a major agent of advanced thinking in urban analysis, management and real time interactive as well as a community tool for participating in multi-stakeholder consensus formation for the built environment. Advanced work in this area by GSAPP has become active in public policy debates, as when the mapping work on incarceration patterns by the School's Spatial Information Design Lab (SIDL) directed by Professor Laura Kurgan contributed to the rethinking of national policy in that area when presented in national policy forums. The SIDL is increasingly influential in the Master of Architecture program and with its work often seen as part of the curriculum of all School programs, the lab has extended what we see and understand when we use the word social or society in design studios. Kurgan has taught in the **A4003 Core Studio III**—the Housing Studio—and her work and studios have also frequently been discussed in lecture format for the entire Core Studio population. Kurgan and her uses of data and geography have helped make discussion of public policy less abstract and affected the overall Housing Studio program. Likewise, the environmental mapping research on the Gateway National Park by the Urban Landscape Lab directed by Professor Kate Orff opened up a new collaborative debate about the future of such shared resources. Students participate in these projects as part of their classes are encouraged to participate in the labs, developing skills that enable them to be well positioned to participate in galvanizing design and the public good.

Core Studio sites have been chosen to address this wider scale of the architect's responsibility to the public good by focusing on changes in city zoning and planning that are affecting housing development and the provision of housing to a wide spectrum of citizens. The city of New York has changed dramatically in the decade since 9/11 as new zoning laws have diversified the land uses but also increased FAR and density on sites outside the central business areas of Manhattan and Brooklyn. The Bloomberg Administration has relied on data to model future demographic change for its PlaNYC studies and has frequently referenced a strong potential for growth in the city. Yet after 9/11 the city also realized that growth away from Midtown and Downtown Manhattan was needed for security both real and imagined: in this decade the city has greatly increased FAR on most major river fronts from Queens and Brooklyn but also on the West Side of Manhattan between 23rd Street and 59th Street. Major areas of all five boroughs were Up-Zoned and studios have explored the potential of this: the Housing Studio has explored the Hunter's Point re-zoning and Mayor's plan for 6000 + units of affordable housing on the site. Again the School believes it is vital to see the built environment as an ever evolving intersection of diverse understandings of the public good and that architecture has a key obligation to not only address the public good but to create the spaces within which such things are discussed. Drawing on the resources of a faculty knowledgeable in diverse areas, these concerns are embedded in the social basis of the required History lecture courses (Prof. Ken Frampton and Prof. Mary McLeod) further pursued through elective lecture courses and seminars ranging from the "History of Housing" (Prof. Gwendolyn Wright) and "ABCDEFG" (Prof. Mabel Wilson), to "The Politics of Space" (Prof. Mary McLeod), to "Architecture, Human Rights, Spatial Politics" (Prof. Felicity Scott). Faculty from allied programs in the school, that share a deep commitment to the public good, notably Urban Planning, Urban Design and Historic Preservation offer key elective classes taken by the architecture students dedicated to social responsibly, joint classes, and they

play an active and increasingly significant role in the design studios. The fact that some faculty are central to several programs creates additional synergies. Studios within both the Architecture and Urban Design program are, for example, finding common ground in landscape and the broader field increasingly known as Landscape Urbanism, with key faculty like Prof. Richard Plunz and Prof. Kate Orff being central to both programs, and the joint studios with Historic Preservation and Jorge Otero-Pailos teaching in both programs brings the preservationist's conviction that the shared heritage is a vital element of the public good into the heart of the architecture program.

The academic culture within GSAPP is diverse and multi-layered: a pluralistic spirit is evidenced by an independent faculty who often are running practices in the city and addressing the role of the client and societal change in direct ways. An international student body has long been a quality at the school but this has accelerated in recent years; students at GSAPP come from more than 55 home countries and the student population brings a wide range of cultural and political situations in the form of life experience but also future practical and professional goals. Our students today are likely to return to practice in cities and countries that are increasingly leading change in how architectural, societal and development goals are realized and more so how new ideas of social equity and quality are idealized. Columbia and the GSAPP have made a deep commitment to learning from our student's experiences but also to learning from their host home countries. While Core Studios address sites in New York, they learn from this wider cosmopolitan heritage and perspective. The evolution of New York City in an era of globalization means studios sites in NYC are discussed in light of cities such as Beijing, Shanghai, Moscow or Mumbai as well as the nearby network of cities in the Northeast rail corridors. This is all made palpable in the real world exchange of the student body.

We feel that this culture and the School's synthetic pedagogical approach combine to prepare students to contribute to a pluralistic society and to address individual, group, and community needs. The core curriculum, advanced classes, research labs, and major projects increasingly address themes that are central to public debate in urban and architectural design The School has also sought to further its work in urbanism in areas were clear societal need are evident: the Studio X network brings students to sites in Mumbai, Rio, Johannesburg and Amman where changing economies and historical social and political circumstance create a need for more socially just architecture and urban planning. Professors Mario Gooden and Mabel Wilson, for example, have led extended research on South African redevelopment, and the Urban Think-Tank work in the favelas of Rio and Sao Paulo has been a multi-year commitment of studios, workshops, events and publications. The Studio-X network allows this work to develop far beyond the usual visiting studio into long term collaborative exchanges. The Studio X network represents a dramatic shift in how GSAPP sees its engagement with cities, people and governments that we work in and visit. Studio X at its core is set up to allow an entrepreneurial mindset: faculty and student proposals guide our use of the spaces and the people we work with on the ground, redefining the sense of architecture's responsibility to the public good and refining best practices.

More immediate United States based societal issues still drive much of what we do at GSAPP. Since our last report an ongoing project to address the national prison population from an architectural point of view has not only matured but also been shown at the Museum of Modern Art: In addition to these commitments to social responsibility in terms of community involvement, ecological management, and urbanization, GSAPP feels a special social commitment to re-imaging not only who we work with and for but also to how we see and demonstrate their needs and potentials. We use data in new ways; we imagine cities and sites in new contexts that are both local and global. We often bridge fields within the school but we also

rely on a faculty who are usually also running practices and thus are aware of limits and where innovation is needed.

While well known for being one of the architecture schools most committed to experimental design practices, GSAPP is also one of the schools most committed to the preservation of cultural memory through the preservation of built fabric. Having founded the first University program in Historic Preservation in 1964, the School is now integrating preservation with design experimentation. The M.Arch. Program is working closely with the Historic Preservation Program. This is most obviously represented in the annual joint studio, between the programs and the sharing of faculty and events, but it is most importantly manifest in the increasing and refreshing attention paid to preservation in even the most experimental studio projects, whether in the program set by the teacher or the approach adopted by the student. The increasing sense of material and social engagement and responsibility in the architecture program includes engagement and responsibility for living history.

I.1.4. Long Range Planning

The main long term goals for the School since the last accreditation have been to double the size of the full time faculty and staff and expand its areas of expertise (to include, for example, landscape design, visualization, environmental engineering, and computation), to develop a vibrant applied research culture, to create a rich set of opportunities for joint classes and research between programs, to engage with the building industry, establish a two years Masters program in Critical, Curatorial and Conceptual Studies as a bridge between the professional degree and the Ph.D. program, and to establish a platform for the highest level of global engagement - all of which have been accomplished. The School is now concentrating on developing a holistic approach to integrating all these new strengths and upgrading its facilities, with the integration efforts and space upgrades well underway. Key long term priorities have been identified in the area of sustainability, infrastructure, globalization, building systems, new forms of collaboration in practice, and ethics.

Given its institutional mission at the intersection between professional training and research (1.4 above), the School has to be continuously self-reflective, both through internal review and through external debate in order to establish key long term priorities and to monitor its success in achieving those priorities. Every public event and private discussion, from global conferences to design reviews and committee meetings, is treated as an opportunity to identify goals and assess progress. To prioritize these goals, the steady rhythm of faculty meetings and committees is supplemented by targeted task forces.

The process for long range planning is that key issues are raised by the Dean, by members of the Executive Committee (the tenured faculty), by Directors of curricular areas, the wider faculty, students, graduates, or by the University. Whatever the source, discussion of the issue within the Executive Committee clarifies the long term question and its importance leading to the establishment of a faculty task force that studies, for example, a particular area of the curriculum, school life, infrastructure, or research, consulting with staff and students. Their conclusions usually result in a revision of the curriculum, policies, or priorities and often to the launch of a targeted faculty search in that area. Search committees are treated as a key part of long term planning—with extensive discussion of how an appointment can reinforce key priorities and which adjustments are needed to the rest of the program—and the progress of each tenure-track faculty member is monitored in terms of these priorities at each review. The reviews of individual faculty progress become a major forum for analyzing the school's path, strengths, weakness and opportunities. Likewise, comprehensive reviews of student portfolios by faculty teams and the collected faculty guide discussion about the success in meeting shared goals and future directions, often stimulating the formation of a task force. In 2007, for example, a faculty task force worked on the curricular area of visual studies—leading to a redesign of the two required classes in representation and the launch of a new system of elective visual studies workshops that has been very successful and the appointment of a Director for that part of the curriculum. The redesigned classes have already been formally reviewed again by a task force and adjusted as part of the general spirit of continuous review.

Over the last year and ongoing, the same process has been working at a larger scale with the entire full-time architecture faculty acting as a curriculum review committee, holding an extended series of meetings to concentrate on the integration of all areas of the curriculum (design, history/theory, technology, visual studies and professional practice). These meetings review and discuss all course offerings, requirements, syllabi, etc. and propose ways to increase the synergies between curricular areas and maintain key priorities. This expanded group is, for

example, guiding the great increased emphasis on technology and the building industry in the school by refining the technology sequence in the curriculum and more closely integrating it into the design studio sequence. Such curricula refinement often leads to targeted faculty hires, which bring new faculty into the discussions, which further adjusts the long term planning objectives and strategies in a continuous feedback loop.

The School also carries out long term planning in collaboration with the University, with annual reviews of long term objectives for the school done with the Provost and periodically works with the University on focused priorities, as for example, when recently developing a multi-year strategy for enhancing faculty and student diversity.

While this continuous long-range planning effort, and all the associated feedback loops, is not explicitly framed in terms of the five perspectives, those perspectives resonate so strongly with GSAPP's core mission that they are clearly reflected in the process. As described above, GSAPP does not see any conflict between its commitment to the academic culture of the University and its commitment to the profession. On the contrary, it takes advantage of its deep immersion in the research University to maximize its contribution to the profession and it takes advantage of its deep immersion in the profession to maximize its contribution to the University. The overarching goal that guides all long-term planning, and the academic/professional balance, is the aspiration to enrich the responsibility of Architecture to the Public Good, which is understood to involve an ever evolving diversity of interpretation of all three concepts: architecture, public and good. The School constantly challenges itself to do better in empowering the architect to lead, as reflected in the role played by graduating students, the role played by faculty in the field and wider community, and the role played by the school itself in identifying and reinforcing the traditional and new opportunities for the discipline and the profession.

To monitor success in achieving these long term priorities, the School closely observes a wide range of key information points. These include: the quantity and quality of applicants at admissions; the quality of faculty applicants; the student electronic evaluation of courses; regular feedback from the council of student representatives; studio lottery and course enrollment statistics; faculty review of students (individual studios and comprehensive reviews of portfolios); commentary from visiting jurors; feedback from the provost and academic leaders of the University; feedback by graduates and by employers; the quality and quantity of faculty publications; reviews of school publications and exhibitions; faculty, student and graduate success in competitions, exhibitions, fellowships, commissions, etc. With such a large component of the school devoted to advanced design research, the balance of classes, faculty, events, etc. is always evolving and the multiple forms of feedback are crucial to decision making. When students are choosing, for example, between 18 different design studios in each of their last two semesters, the balance between student interests, faculty expertise, school and university priorities and the key issues facing the profession needs to be very precise. In a very real sense, the school is always a work in progress. All aspects of the curriculum are continuously refined to accomplish the long term goals.

I.1.5. Program Self Assessment

Self - Assessment Procedures

Self-assessment is an always ongoing active process involving all members of the School community. Formal self-analysis of all the programs in the School is periodically carried out at the University's request, as with any of the other Schools. The last such self-study was completed in 1995. Individual aspects of the programs are periodically given formal self-study, as for example when the Ph.D. program in Architectural History and Theory and the Ph.D. program in Urban Planning were part of the 2006 accreditation of the entire University by the Middle States Association.

Ongoing, day-to-day self-assessment is a shared responsibility of the Dean and the various Program Directors and Directors of key curricular areas. The Directors are in regular contact with both students and teaching faculty and are therefore ideally positioned to evaluate and communicate strengths, weaknesses, and criticisms from within and without. Directors are responsible for responding to comments and criticism regarding the M.Arch. program's structure, course content, organization, and pedagogical effectiveness. Directors meet regularly with one another, with the Dean, with the faculty Coordinators for individual curricular sections and with the elected student representatives of the Program Council (described below). Evaluations are anonymous and solicited electronically from all students in all classes each semester. These Teaching Evaluations are made available to individual faculty members as a way of improving upon course content and teaching methods. Since the architecture program is based on a controlled transition from the stable core training to the advanced experiments where the mix of options is constantly being adjusted in response to shifts in faculty and student interests and expertise, all aspects of the program are subjected to constant scrutiny. The ability of the core to sustain subsequent experiments and the ability of the experiments to support and extend the key skills and professional responsibilities incubated in the core is watched closely.

The Directors of each part of the curriculum (core, advanced, technology, visual studies, history/theory, professional practice, etc.) offer constant feedback to the administration. Student evaluations, whether informal or through Program Council or formal evaluation reports, play a major role in guiding the operations of the Program, particularly with regard to studio classes. The mid-term and final juries with visiting critics are also a major source of feedback on the studio goals and methods. Comprehensive reviews, while primarily intended as a source of advice and counsel for the students, are also a means of self-assessment for the School. At the end of the first year and beginning the third year, students are required to compile a portfolio of their work to date at the GSAPP, which is reviewed in an interview with two or three faculty members. This process gives the students insight into their strengths and weaknesses, and guides them towards improvement in their future work. Participation in comprehensive reviews gives faculty the opportunity to interact with colleagues outside their usual purview, as well as students who are not necessarily enrolled in their classes. The two comprehensive reviews of each student's work offer very detailed feedback on which aspects of the Program are going well, and opportunities for each student to describe the strengths and weaknesses of the curriculum as they have experienced it. This cycle of interactive feedback culminates in the intense scrutiny and discussion by faculty in the annual design awards meeting, which is used to evaluate the whole Program and is a key resource for monitoring trends. Each graduating student submits a portfolio of their entire sequence of studio projects at the School to be evaluated by the faculty at the meeting. Likewise, the meeting of scholars for the history/theory prizes is used to monitor

progress in history/theory seminars. The coordinators of each semester work closely with their faculty to review the curriculum goals and refine the assignments. Studio line-ups are maintained in such a way that at least two studio teachers from each semester teach in the following semester to give continuity to the curriculum and ongoing knowledge of the particular strengths and needs of each student group but no more than three so that students can take pedagogical advantage of the diversity of faculty approaches and forms of expertise.

The end-of-year exhibition also offers a very detailed picture of the School, affording faculty, students, administration, and colleagues from other schools the opportunity to evaluate the progress of the Program in achieving all its objectives—aesthetic, technical, ethical, etc. As a long standing and ambitious School-Wide project, the exhibition provides the school a means whereby all faculty see other's studio work, visual studies, and research. Also, students and faculty alike debate and address the entire scope of goals and ideas addressed each year. Because this show has been a GSAPP enterprise for more then 20 years we are also able to address changes we see in the school from year to year and over decades. Coupled with the annual publication of Abstract we have both the actual work and in terms of models, and drawings as a school-wide body of evidence but also a publication that exhaustively records the school's intellectual and design production. Both represent a significant financial and academic investment and have been central to the way the school achieves an internal self-assessment and feedback from the outside academic and professional community Faculty and students take their contribution to the exhibition very seriously and closely examine the contributions of their colleagues. The exhibition accurately reflects the state of the School. Each student must carefully make a very compact presentation of their individual project, within the presentation technique designed and constructed by the student group under the supervision of the teacher. Each teacher selects work for publication in the annual book on the School, *Abstract*, and on the GSAPP website. A new policy of having all students submit their design jury presentations to the school is being introduced to deepen this ability to assess individual and collective progress.

The Program Council, made up of several representatives of each year of the Program, meet regularly with the Dean and senior administrators to offer feedback and suggestions for guiding the Program that might best meet the needs and desires of the current student body. The Program Council is an advisory body made up of elected student representatives from all years and all programs of the School. The Council provides a crucial point of contact between the administration and students. Student representatives set the Program Council's agenda. It serves as a forum for discussion of any issue of importance to the student body: for example, the effectiveness of existing course offerings and curriculum, suggestions for new courses and studio critics, and improvement of School facilities and infrastructure. Individual program representatives meet with the Dean and senior administration on a variety of issues whenever those issues arise.

The Studio Lottery System also allows for an informal evaluation of critics by the students. The Dean keeps records of the lottery results for each semester and analyzes them closely. If there seems to be a pattern of less desirability with a critic, the Dean will review the student evaluations in order to make a decision about future assignments. In reverse, teachers with a consistently high rating by the students are usually encouraged to play a more central role in the school.

Meetings of tenured faculty, full-time faculty, and adjunct faculty address curricular issues. The faculty meets as a whole one to two times a semester, depending on the business at hand. These meetings are both advisory and informational in character, and issues of student affairs, pedagogical intentions, and future directions are discussed in detail. In recent years, the full-time Architecture faculty has met more regularly to focus on the integration of all elements of

the curriculum to review the coordination of curriculum and review and revise as deemed appropriate curriculum content. The Executive Committee, comprised of the School's tenured faculty and the Dean is the key body for assessment of all dimensions of the programs and faculty governance. Meeting monthly, the committee advises the Dean on curriculum changes and faculty appointments and series of special meetings are also held to carry out major reviews of tenure-track faculty. Full-time faculty appointments are managed through search committees of tenured and non-tenured faculty that are created specifically for each search and include members from programs outside the specific one targeted in the search, and sometimes includes members from other schools, for example recently our search for a Technology position included a faculty member from the School of Engineering. GSAPP search committees analyze the strengths and weaknesses of programs in great detail and explain the rationale behind their choices to the wider faculty. The Executive Committee votes on all tenure track reviews and recommendations for faculty promotions to tenure. Specific task forces are established to focus on particular issues. Such task forces operate as Committees of Instruction as required to implement significant curriculum changes. A history/theory faculty committee meets to adjust the requirements; another team meets to raise overall admissions standards in TOEFL or GRE, and so on. These committees are composed of tenured, non-tenured, and adjunct faculty, administration, and students as required. For example, a Committee composed of faculty, students, and the IT staff was formed to transform the School's objectives, facilities, curriculum, organization, student input, and maintenance policies in digital design. After a year of meetings, substantial changes were successfully initiated. Likewise, such a group analyzed the visual studies curriculum and designed the changes that were enacted, and a full faculty group has been carrying out an extended series of meetings to advise on the technology curriculum and the integration of all the different elements of the program.

With the formation of the Alumni Relations office in the School, feedback from Alumni can now be more easily sought. Since the last accreditation, an Alumni Association has been established, which is already very active. Annual alumni weekend conferences are held at the school, where the latest developments in the school and in the field are discussed in detail and alumni projects are exhibited alongside projects by current students. Students are particularly appreciative of alumni feedback for their work. The new Studio-X global network has also acted as a key platform for Alumni engagement. The Alumni and Development office also uses alumni surveys to make recommendations about Alumni Programs. Alumni feedback is also used by the dean to make curriculum adjustments. It is hoped to extend this feedback in the future, with a formal advisory group of alumni helping to guide the School in making specific decisions.

Studio and history/theory/technology offerings, along with the events, exhibitions, publications, and research initiatives are very precisely adjusted in response to these different forms of feedback in order to best carry out the School’s core mission of providing the highest standards of professional training while opening up the discipline to new potentials, forms of expertise, and responsibilities through open-ended collaborative investigation.

The GSAPP also has other informal methods of self-assessment, which serve as a series of checks and balances. The Dean has an open door-policy-for students, faculty, and staff. Students and faculty may present comments and criticism as groups or individuals on an ad hoc basis, as well as in the Program Council, and Faculty and Executive Committee meetings.

Sample forms are included at the end of this document: Appendix 1: Seminar/Lecture Evaluation by Students, Appendix 2: Studio/Course Evaluation by Students, and Appendix 3: Student Evaluation by Faculty.

Student Evaluations are kept on record in the School. Each student's file is accessible by both the student for review and other faculty members for consultation if difficulties arise with a particular student. This file system allows faculty members to consult with other professors who may have had similar problems and to evaluate methods for proceeding with the education of the student.

Faculty Evaluations are kept on file and are available for review by professors. This allows them to make adjustments to teaching methods and to revise curriculum in certain instances. The Dean and the Executive Committee also use the evaluations for the purposes of review for tenure and promotion of faculty members.

Self-Assessment Summary

As detailed above, self-assessment is a continuous multi-layered process with all the different forms of feedback from all parts of the school community impacting curriculum development, hiring, teaching assignments, policy formation, budgetary priorities and long-range planning. The following summarizes perceived program strengths and concerns since the last accreditation.

Since the last accreditation, GSAPP has continued to accept many opportunities and challenges to evolve. As a result, the School is flourishing in most of its key parameters. The quality of applicants continues to go up and students are coming to the School with a greater commitment to the practical, social, technical, and professional challenges facing the architect today, along with stronger abilities in research and communication. This has encouraged many teachers to raise the level of their individual classes, changed the balance of faculty, and encouraged significant refinements and additions to the curriculum.

The main feature of this evolution is a great school-wide sense of practical engagement (social, technical, ethical, political, and professional) in the challenges facing the architect today. GSAPP student work is increasingly based in real world engagement: studios have focused their analytical and design skills on difficult sites and urban issues, often working closely with the city, community, and institutional support. An increasing proportion of the School is dedicated to applied research that bridges the once separate worlds of design and scholarship.

In parallel to this, there has been a substantial growth in cross-disciplinary exchanges and collaborative teaching and research. Research itself has grown to be a major, active part of the School, with the addition of new scholars and the foundation of a new set of highly active research labs addressing a wide range of issues, as well as a greatly expanded event, exhibition and publication program.

The single greatest strength of the School is the great spirit of collegiality and mutual respect between faculty and students, between programs, and between the School and the University. There is a deeply shared commitment to the evolution of our discipline by extending rigorous professional training into equally rigorous explorations of new potentials for the stewardship of the built environment.

Summary of Self-Assessed Strengths

Leadership: According to its key parameters, GSAPP believes that it continues to play a key role in international debates by fostering pioneering work in design, history/theory, and applied research.

Design Culture: GSAPP believes that it continues to fulfill its aim to provide the most advanced design studios availableas part of its training of students to be future leaders in the design profession and faculty to be leaders in the University and in the wider community. More recently, the school has taken its long term commitment to the international design community much further in having established with its network of active facilities around the world what is arguably the deepest commitment to the global environment and the most expansive global infrastructure for teaching, research and communication of any school.

History/Theory Culture: GSAPP believes that it is maintaining its aim to provide the most advanced scholarship available, having significantly expanded its team of scholars from junior to mid-career to senior level to assemble the strongest team in the field. The launching of the new program in Critical, Curatorial and Conceptual Studies, and the building of the new Center for Global Design and Development, highlight the continued expansion of the scholarly culture in the school.

Applied Research Culture: GSAPP believes that it is realizing its aim to provide the most deepest applied research culture, with the establishment of a set of material, structural, fabrication and data visualization research initiatives that link state-of-the-art digital design practices to building analysis, modeling, simulation, fabrication, monitoring and interactive systems. The new Laboratory for Applied Building Science, the Columbia Building Intelligence project (C-BIP) devoted to the future of the building industry, and the design-build fabrication classes, workshops and realized projects highlight the expansion of applied technology culture in the school. More broadly, a deep applied research culture has been developed in the school, in collaboration with major partners in industry, engaging with the most urgent conditions and questions facing our shared world.

Architectural Education: GSAPP believes that it is realizing its aim to make positive contributions to establishing best practices in architectural education. Many Columbia faculty play a very active role in reports, symposia, conferences, books, etc. devoted to excellence in architectural education both nationally and internationally. This also involves working directly with colleagues from the wider community of architectural education, as for example when Jorge Otero Pailos was the co-organizer of the 2006 ACSA/AIA Teachers Seminar on “Historic Preservation in Architectural Education” and the associated design competition and reports and Professor Mabel Wilson’s appointment as co-chair of the 2014 ACSA National Conference. Similarly in the global context, during the course of any year, a number of the architecture faculty participate in conferences on architecture education such as the “International Architectural Education Summit” in Tokyo (2009) and in Madrid (2011). In addition, faculty publish widely on the topic of pedagogy, often contributing textbooks. For example, Professor Ken Frampton’s “A Critical History of Modern Architecture” now in its 4th edition, remains the standard teaching guide for schools around the world. In recent years, Paul Segal has written the

authoritative textbook “Professional Practice: A Guide to Turning Designs into Buildings” based on his classes at GSAPP.

Human resources: Student, faculty, and administration have been significantly strengthened.

Students: There has been an increase in selectivity through higher numbers of applications and raising TOEFL and GRE standards, and an increase in international representation, with students from more than 50 countries now attending the School. The higher quality of incoming student has led to the development of a more demanding design curriculum and a higher level of advanced work.

Faculty: GSAPP has substantially upgraded the teaching faculty with a series of new hires and tenure appointments. A new generation of architects and scholars has been assembled to complement the strength of the senior faculty. A recent faculty search in the design area of the school has lead to confirming seven new Professor of Pactice or tenure track appointments in design. We are also nearing the completion of a search that will appoint a new Director of our Architectural Technology Sequence as well as establish a strong leader for a school wide focus on the future of energy in architecture, planning and real estate. The School’s ambitious ten-year program to double the size of the full-time faculty will likely be successfully completed in the coming year. The range of professional and scholarly expertise and the size of the core team of faculty involved in key curricular and administrative guidance have been substantially increased.

Administration: The School has greatly expanded its administration team in recent years, with new positions in visual studies, special events, finance, publications, GIS, networks and computation, global programming, development, career services, the dean’s office, and alumni relations. Further positions will likely be added in the coming years as the applied research and global culture continues to grow.

Physical and Financial Resources: Since the last accreditation visit there has been a substantial upgrading of GSAPP’s physical and financial resources.

Facilities: The physical facilities of the school have been expanded with a new set of teaching, lab, research, office and exhibition spaces on the campus, off campus and around the world. There has likewise been a continuous upgrade in computing, audio-visual, networking, wireless, modeling, 3d and 2d printing, laser cutting, and CNC fabrication equipment. Having played a pioneering role in computer-aided design in architectural education, the School provides a state-of-the-art electronic design environment, with an extremely responsive IT team collaborating closely with faculty and students.

Current goals in developing the remainder of the school facilities include upgrading the two suites of faculty offices in Buell Hall, renovating the smaller lecture theatre on the 100 level of Avery and upgrading the design studios on the 500, 600 and 700 levels. A faculty task force has analyzed the need and aspirations for this step. While the upgrade to faculty offices can be progressively accomplished within the overall budgetary ecology in the sequence of space upgrades being performed (typically over the summer months) and the upgrade to the lecture theatre can likely be funded through

a naming opportunity, the major initiative of renovating the studios is a more substantial project and a core pedagogical space (the "engine room" of the school) that is not a likely naming opportunity, so funds are being put aside each year to support this project. Having sufficient funds to commence this work therefore represents an important challenge to be accomplished in the next two years but the budget is on track to accomplish this.

Finances: The School's finances continue to be robust, with the build-up and maintenance of a healthy reserve and with the new fundraising campaign maturing and successfully addressing the range of student financial aid, faculty appointments, research, space, equipment and future needs.

Student Support: There is increased support for student events, publications, and travel opportunities. As in the past, all students are supported in international travel for site visits during their final studio project but support is increasingly offered for research trips by history/theory seminar classes for national and international travel (recently, for example, to Italy, India/Pakistan, Japan, etc.). International travel is also increasingly supported for design studios in the Fall Semester in addition to the Spring, with students travelling recently to Brazil, Jordan, Nigeria, Turkey, South Africa, etc. Students increasingly have the opportunity to join international design workshops in the summer (recently, for example, to China, Brazil, Jordan, Italy, Finland, Turkey, etc) with the school covering the majority of expenses. The growth of the applied research culture in the school is providing increasing opportunities for students to supplement their income through research assistance-ships, publication projects, etc

Faculty Support: More support is now offered to junior faculty, with the success of the new policy to give each full-time faculty member a paid semester of leave between their fifth and seventh semesters to help them develop the work required for consideration for tenure. More support for individual projects, publications, conferences etc is provided on a case by case basis for both junior and senior faculty.

Curriculum: The M.Arch. curriculum has been refined in recent years through a series of cumulative structural adjustments. In both the design and history/theory/technology classes, a steady semester-by-semester increase in complexity, accompanied by an ongoing spirit of technical precision and critical inquiry, is carefully fostered.

Design Studios: The studio sequence has been tightened up with a more clearly established progression from the precise shared constraints of the first three Core Studios to the variety of explorations in the final three Advanced Studios. Greater attention is paid to establishing a gradual transition from Core to Advanced. Studio assignments in the first year—intended both to develop incoming students' design abilities as well as to expand their technical and conceptual capacity—are chosen in anticipation of the increased complexity encountered in the second and third years. To establish this calibrated transition, all three Core Studios are supervised by a single Director, Prof. Michael Bell, who works closely with the Director of the three Advanced Studios, Prof. Laurie Hawkinson, to provide a comprehensive and cohesive curriculum. Each of the three Core Studios has a separate faculty Coordinator who develops the

specific design assignments in collaboration with the Directors of Core and Advanced Studios. Three full-time faculty members, two hired recently, with specific responsibility for coordinating the core studios, Prof. Galia Solomonoff (**A4001 Core Studio I**), Prof. Amale Andraos (**A4002 Core Studio II**), and Prof. Hilary Sample (**A4003 Core Studio III**). Lectures, seminars, and readings have been increasingly integrated into the Core sequence. The complexity of assignment and expected level of individual experimentation in the fourth semester has been increased to provide a smoother transition to the final two Advanced Studios. Fourth semester studios increasingly involve direct engagement with material and fabrication research. The C-BIP "Energy + Adaption" studio, for example, has combined 30 students with 3 faculty and a series of invited consultants in environmental engineering and environmental modeling to work collaboratively using a shared digital platform to develop building elements suitable for renovating existing New York City buildings to meet the 2030 sustainability goals of the city administration. A special studio space has been set up to support this kind of collaborative work that is increasingly central to professional practice. More recently, the school is hiring an environmental engineer onto the faculty and has established the Eco-Lab to guide this work. Parallel studios have worked on particular materials, design build initiatives, etc. The work done in this fourth semester increasingly impacts the wider curriculum, as can be seen in the establishment of a C-BIP studio option in the Fall semester of the final year to allow students to continue to develop their interest in this area. Additionally, Roving Engineers – providing expertise from structural, environmental, façade, MEP and for the first time this fall landscape and site design are available at two key points in the semester for students to receive one on one consultations with these specialized experts for their fifth and sixth semester of Advanced Design Studio projects.

In the final Spring semester, all studios are now required to travel to one of the Studio-X locations around the world. This has greatly enhanced the quality of work and depth of engagement. As a range of different teams is travelling to each Studio-X city at any one time, there is a greater sharing of knowledge between studios. Also teams from other programs within the school are also visiting at the same time, leading to a greater sharing and collaboration between programs. In addition, the fact that other studios and research teams were in the same city in the years before creates a developing knowledge base. The local Studio-X staff deepens the local professional, technical, political and community contacts for each studio and attend the final reviews. A deep relationship develops over the years between the school and each city, with the work of the faculty and students deeply embedded in the real conditions and complexities of rapidly evolving global cities.

Visual Studies: The position of Director of Visual Studies that was established to institute an innovative system of six-week visual studies elective workshops has been transformative for the program and extremely effective for both teachers and students. All basic techniques are now placed within a clear practical and conceptual context and the advanced workshops are able to go much deeper into a greater diversity of very specialized themes. The use of the lottery system with students selecting from around 30 options each semester allows the array of these specialized methods-based workshops to be as responsive to shifts in the field, and as proactive in initiating such shifts, as the Advanced Studios. These shorter highly specialized and responsive classes are a major asset to the school in pro-actively engaging with changes in the field and offer the

students a way of deepening specific professional interests. In recent years, technology options have been increasingly included within the same array of specialized choices.

Technology: Building Technology teaching has been enhanced by greater integration with the studio and history/theory classes. Teams of engineers are brought into Core Studios to offer feedback on student projects. The School has doubled the number of full semester Technology electives by bringing in local talent to teach classes like Acoustics (Raj Patel), Infrastructure (Sean Gallagher), Airport Design (Emilio Chacon), etc. Furthermore, such electives are extended through independent study options and applied projects in the research labs. Public lectures and symposia increasingly focus on material, fabrication, assembly, and performance issues being investigated in the design studios with such events usually initiated by the design faculty. The engagement with technology has become one of the central strengths of the program and a major source of inspiration to the wider initiatives at the School.

All aspects of construction and building technology have become vital to both the school's core curriculum and its research culture. For example, the series of major conferences on specific building materials, (glass, concrete, metal, and plastic so far) with each bringing around 50 international designers, engineers, manufacturers, and historians together for 3 days to compare notes and develop a definitive account of the current state of a material that is then documented in a major monograph published by the school, has become central to school life. Not only do these events embed the school within the wider professional context of engineers, consultants, manufactures, fabricators, and materials industries but these events typically lead to ongoing research and teaching in that area. The industries that supported the four conferences on glass, metal, concrete and plastic have all supported design studios in the following years. One such partnership, with Oldcastle Building Envelop, for example lead from the glass conference, to the establishment of the Columbia Building Intelligence Project (C-BIP) devoted to the future of the building industry, and then to the recent establishment of Eco Lab as a key interdisciplinary research unit to act as a focus for the school's work on all dimensions of sustainability. As part of the C-BIP project, the school also organized a series of seven day-long C-BIP think-tanks in New York, London, Stuttgart, Tokyo, and Toronto that bring architects, construction companies, engineers, fabricators, material companies etc together to focus on key questions facing the building industry ranging from automation to optimization. The deepening of this engagement with technology (all the way from Kenneth Frampton's core thinking on tectonics given to all students in one of the required history lecture course through to the most advanced experiments in fabrication) is both a great strength of the school and a great opportunity. After several years of discussing how to enhance technology thinking within the school, the faculty is now seeking to deepen the ties between this area and the design curriculum even further by overlapping the core housing studio and the core technology sequence to provide a two semester intersection of design and technology over the third and fourth semesters at the heart of the curriculum.

History/Theory: The range of course offerings has greatly increased with the addition of new history/theory faculty and traditional lecture/seminar formats are sometimes supplemented with six-week seminar classes following the model of the visual studies electives. A broader cross-over zone between design and history/theory has been

established with studios increasingly involving a research component and an increase in the number of history/theory seminars involving an element of design work. Each history/theory faculty member is encouraged to teach a range of classes from core offerings (usually large survey lecture courses) to advanced explorative offerings (usually small focused seminar courses). As with the Advanced Studios, the focus of the exploratory classes changes frequently with the shifting interests of faculty and the wider discipline. The recent tenuring of Professors Felicity Scott and Mabel Wilson and appointment of Enrique Walker (Full-time) has added great depth to the history/theory faculty and broadened the curricular range. Having effected major changes to the design and visual studies and initiated such change in the technology curriculum, the challenge is now to likewise develop the history/theory curriculum further to adjust for the increasingly global context of all architectural practice, the rapid evolution in the tools of design and communication central to architectural practice and the fact that the curriculum can no longer simply assume the high point of modernism in the 1920's as the natural epicenter of the curriculum. The first step in this direction has been to establish a post-1945 lecture class and a new lecture class focusing on the history of architectural representation as a key dimension of the discipline. Faculty are currently engaging with the design of an enhanced history/theory curriculum.

Integration: The different elements of the M.Arch. curriculum are now more tightly integrated. A series of overlaps has been established between the newly calibrated core studio sequence, the history/theory lectures and seminars, the building technology sequence, and the visual studies workshops so that the program can all be understood by the students as a synthesis of the different forms of expertise crucial to architectural practice. The applied research culture supported by the series of labs also contributes to integration as each lab sponsors events, classes and collaborative projects that provide overlap between programs and between curricular areas. In a very positive collaboration, the entire full time faculty has been meeting regularly to review in detail all aspects of curricular integration. In a school of such intensity and an atmosphere of continuous production and experimentation, such moments of comparing notes, analyzing classes and seeking opportunities for enhanced integration are especially valuable. The further upgrading of the required visual studies classes, new integration of the housing studio and technology sequence are, for example, a direct result of these meetings. Similar improvements in the History/Theory integration are being worked on.

Practical Engagement: There has been substantial school-wide recommitment to all aspects of engagement in the wider context of architectural practice.

Material Practice: Having successfully developed highly experimental forms of architectural design over the last 15 years, faculty and students have become passionately dedicated to the constructability and realization of their work. As many of the junior faculty who carried out the more exploratory design work at GSAPP are now running increasingly successful practices with a growing scale of commission, they have brought their new commitment to constructability into the curriculum. There has been a thorough integration of conceptual and technical exploration. As outlined above the overall concern with constructability, building systems, fabrication, material science, and

with passage of projects through community, planning, and financing processes increasingly permeates the design studios as a whole.

Sustainability and Ecology: GSAPP faculty and students have become increasingly dedicated to questions of energy intelligence and responsibility. This commitment is reflected in the themes of studio projects, seminars, visiting lectures, conferences, and publications and is explicit in the student work and applied research carried out by faculty. It has been reinforced through permanent and adjunct faculty hires and the inauguration of dedicated research labs—like the Eco Lab, the Urban Landscape Research Lab and the Urban Design Lab. The hiring of an environmental engineer onto the faculty was established as a key priority.

Social Responsibility: Faculty and students are increasingly dedicated to the social context, impact, and responsibility of their work. This school-wide sense of commitment is evident in studio assignments, dedicated research labs, lectures, and symposia, which all increasingly address local, national, or international social issues, focusing on questions of poverty, disaster relief, environmental remediation, historic preservation, social justice, etc. Projects have ranged from emergency work for Japan, New Orleans, Kabul, and Nairobi, to studies of key questions like affordable housing, the International Criminal Court, the prison system, globalization, and gentrification. This has lead to an increasing amount of collaborative work with community groups, public agencies, not-for-profits, etc. Faculty and students are deeply committed to the multiple responsibilities of the professional architect in actively contributing to the enhancement of the built environment while also acting as a public advocate for the many different dimensions of social justice.

Professional Practice: Combining issues of both the theoretical and conceptual with the ethical and business aspects of practice, the professional practice curriculum seeks to act as the bridge between academia and practice. Emphasis is placed on the symbiotic relationship between design and business to create successful architecture. Discussions of the future of practice and the profession stimulate new ideas and potential ways of constructively using the architectural education. Activities beyond the classroom aid students (and graduates) make the transition to practice.

Globalization: Having always seen itself and its core leadership mission in the international context, with a student body and teaching faculty from all over the world, an a long tradition of working collaboratively on site around the world with faculty and students, recent years have seen the School substantially deepen its engagement with the question of globalization that is having such a transformative effect on contemporary professional architects, their clients, and the wider communities that they serve. Through a wide array of interlocking studio assignments, history/theory courses, lectures, symposia, and both interdisciplinary and international partnerships, GSAPP is committed to making leadership contributions in this key area. The establishment of the Studio-X global network constitutes the first real time global think tank on cities and the Center for Global Design and Development being constructed by GSAPP aims to galvanize the best minds across the wider University to address the global built environment of cities. The network and the center are understood as key infrastructural investments necessary for

the field to address the urgent question raised by the fact that 70% or the world's 9.3 billion inhabitants in 2050 will be living in cities.

Research: There has been a substantial increase in the amount and type of research carried out within and by the School.

Research Labs: A new set of cross disciplinary research units have been established to carry out applied research in conjunction with workshops, seminars, design studios, symposia, and publications. These labs are playing a major role in expanding the core curriculum, activating school-wide discussion, bringing the different programs into partnership with one another, linking the School to a wider set of partnerships in the University and the wider community, and identifying new professional responsibilities and assets for the professional architect.

Research Personnel: A new generation of teachers and research staff has been hired with both Ph.D. training and their own design practices to act as a key bridge between the full-time scholars and the full-time practitioners. The school has an unprecedented number of researchers engaged in the widest range of key questions and opportunities facing the profession.

Ph.D. Program: The Ph.D. Program in architectural history and theory, founded ten years ago, has now reached a critical mass and achieved a sense of momentum. It is treated as a major asset and an intimate part of the M.Arch Program through the direct involvement of Ph.D. students as teaching assistants in history/theory and studio classes, juries, symposia, publications, and exhibitions. The 15 or so Ph.D. students in residence are all professionally trained architects that share the design students' commitment to moving the discipline forward to meet its new challenges, and they play an important role in the M.Arch. Program.

Critical and Curatorial Studies Program: The new two year Masters Program in Critical, Curatorial and Conceptual Studies program, now in its third year, has added a new dimension to the research ecology in the school with each student developing a year long thesis in their graduating year. The students in the program are very active in design studios, exhibitions, publications, and research projects. They organize major research symposia and international workshops.

Advanced Architectural Research Program: In response to strong demand from students, a new program has been established to allow a small group of graduating students to stay an additional optional year at the school to carry out an advanced research project of their choice supervised by faculty members. The quality of work has been very high.

Partnerships: In addition to the interdisciplinary partnerships with other departments of the University, major research partnerships with other institutions and companies have been established, for example, working with the Moscow Institute of Architecture (MARKHI) on the future of the global metropolis, with Audi on the future of motion in cities, with Oldcastle Building Envelope on the future of the building industry and energy

responsibility, with Thompson Reuters on the most advanced forms of visualizing data, etc.

Symposia: The number of research-based lectures, symposia, conferences and think-tanks has significantly increased with an unprecedented number of annual events providing a continuous density of research. With the establishment of the Studio-X global network and major research partnerships with global companies, these events are also increasing staged outside the school and around the world with video streaming and archiving providing for active participation and consultation by global experts and audience. In addition, these events often culminate in major publications.

Interdisciplinary Work: While the M.Arch. curriculum has become more focused, there has simultaneously been an exponential increase in the formal and informal collaborations between programs in teaching and research, as well as with other schools and departments within the University, and with other universities around the world. Design studios as well as seminars are increasingly offered with team teaching and an interdisciplinary faculty.

Joint Studios: Within GSAPP, joint studios between Architecture and Historic Preservation, between Architecture and Urban Planning, and most recently between Architecture and Real Estate Development have become key sources of exchange and shared learning. Joint studios with other schools at Columbia (like the Schools of Engineering, Journalism and Sociology) also play an important role.

Joint Seminars: History/Theory classes are likewise increasingly co-taught in collaborations between programs at GSAPP and with faculty from other schools (like Anthropology, Journalism and the Earth Institute).

Joint Research: There has been a substantial increase in the number of research projects carried out by teams that combine faculty from the different programs within GSAPP, or with faculty from other schools, like The School of Public Health, The School of International Public Affairs, The Earth Institute, The School of Engineering, School of Journalism, School of Public Health, etc. GSAPP has also entered long-term research partnerships with other universities and organizations. Faculty and students from the M.Arch Program are increasingly playing a key role in these interdisciplinary projects.

Events: The number and variety of public events has increased dramatically. These form an ever more substantial part of the School's curriculum, intersecting and supplementing the regular classes. The School prides itself on maintaining a quantity and quality of events far greater than any other school in the world, and benefits from rich interaction of these events with each area of the curriculum.

Diversification: The traditional lecture series has been expanded with the addition of evening panel discussions of key issues facing the field, and discussions of recently completed buildings, books, exhibitions, and films. A continuous series of lunchtime lectures, symposia, and conferences is offered in afternoons, evenings, and weekends for more detailed explorations. In addition to the substantial set of school-wide events, each of the programs at GSAPP runs its own lecture series every semester open to

students from the other programs. There is rarely a lunchtime or evening without at least one event. The result is more than 250 speakers visiting the School in a semester. There is such a density of events that students have to carefully choose those that they will attend in the same way that they choose classes.

Technology: GSAPP has installed a system that allows for the full array of multi-media presentations, with live feeds from the main auditorium broadcast to a series of viewing rooms in the building to accommodate over 1,000 spectators for the biggest events, video-conferencing for multi-site events, and real time video editing of events. Students continually take advantage of the fact that almost all the events in the main lecture hall are video recorded and available on DVD for later viewing. All events are archived, most major events are uploaded to the web for global access and an increasing proportion of the events are live streamed.

Global Events: With the establishment of the Studio-X Global Network, GSAPP's program of lectures, panels, symposia and exhibitions now operates continuously around the world.

Publications: With the publications office working in collaboration with some of the most highly regarded and innovative graphic designers, there has been an increase in the range and quality of monographs, journals, studio books, exhibition catalogs, symposium proceedings, edited collections, etc.

Studio Books: GSAPP is increasingly publishing books related to specific studio projects, whether of a single studio as in the forthcoming *Global Topologies: Converging Territories* which documents Mario Gooden's Advanced Architectural Design Studio from Fall 2009 and its explorations of Amman, Jordan or of a whole program as in the Urban Design program's E*merging Urban Futures in Land Water Infrastructure: South East Queensland* which documents the partnership between GSAPP and the Faculty of the Built Environment and Engineering, Queensland University of Technology or *Building on Temple Mayor: Design with Historic Architecture which* features the work of the joint studio conducted between the Historic Preservation and Architecture programs during the Fall of 2006.

Exhibition Catalogs: As the school continues to contribute to the collective knowledge of the discipline, exhibitions become crucial moments in which the School and visitors reflect on both the past and its potential for the future. Thus, exhibition catalogs often become the way in which these moments of reflection are disseminated throughout the discourse (for example Felicity Scott's *Ant Farm: Living Archive 7*, presented a detailed and extensively illustrated reconsideration of the early trajectory of the Ant Farm collective, including its architecture, inflatables, performance, multimedia, and video work) and books of key but lesser known texts (like John Mchale's *The Expendable Reader: Articles on Art, Architecture, Design, and Media, 1951-1979*,) highlighted McHale's theorization of technology and communication and their impact on traditional ideas of culture. Assembled from a broad range of sources, the book enables a sharper grasp on McHale's thinking and on our own cultural situation.

Likewise a companion to a wonderful exhibition, *Dan Graham's New Jersey* presents new photographs by Dan Graham taken in the context of a study trip with the architecture faculty of Columbia University—together with the original photographs from the Homes for America series. The new images exhibit stark similarities to the older ones, taken in the same suburban locations that Graham photographed in the 1960s. The juxtaposition creates a fascinating play of repetitions and differences that raise questions regarding the future of architecture, suburbia, and public space.

Faculty member Erieta Attali's *In Extremis: Landscape into Architecture* presents a cartography of contemporary global architecture, focusing upon the close relationship between different building types and the landscapes in which they are situated, illuminating the resonances and contrasts, continuities and discontinuities between new work and the natural or urban environment. The photographs identify unlikely affinities between projects located in very disparate places (from the Atacama desert in Chile to arctic Norway, from glaciers in Switzerland to the suburbs of Japan).

Conference Proceedings: GSAPP is increasingly publishing major monographs based on major conferences (like the *Solid States: Concrete in Transition*, *Engineered Transparency: The Technical, Visual, and Spatial Effects of Glass*, both edited by Michael Bell and Craig Buckley*, Architects' Journeys: Building, Traveling, Thinking, Five North American Architects: An Anthology by Kenneth Frampton*, etc). The school also publishes monograhs based on translations of key historical books by architects like the forthcoming *Ludwig Hilberseimer: Metropolisarchitecture* which presents for the first time the English translation of Hilberseimer's *Groszstadtarchitektur* and is the second title in the GSAPP Sourcebooks series.

Journals: GSAPP publishes two journal, *Future Anterior* (the first scholarly journal devoted to historic preservation theory) and *Volume* (a collaborative magazine of special issues devoted to different themes), which are both gaining ever wider international distribution. A new bi-annual journal, *Potlatch*, founded by Yehuda Safran, focuses on the interplay between art and architecture.

Website and Digital Pedagogy: Having pioneered the use of the internet and e-publication of its work, the School's website provide what is probably the largest on-line archive of any school, with a continuously updated record of student and faculty work, publications, real-time events information, and individualized pages for all the different programs and research units, along with all key practical information about classes, school life, etc. *CC* a live report on school activities offers a continuous monitoring of faculty, student and graduate work in website, social media and printed form.

GSAPP has recently established a Cloud Communications Group which is devoted to all aspects of digital pedagogy supporting for example each class in the school with its own digital blog, new digital archives of past recent and current work-in-progress, platforms for collaborative and global real-time research and debate, a portfolio platform for all current students, faculty, and alum, etc.

Student publications: In addition to supporting regular student journals, GSAPP supports the publications of catalogs for exhibitions curated by the students themselves.

Outreach: There has been a renewed connection to the profession, alumni, consultants, public bodies, community groups, non-for-profits, other disciplines, other schools, and other universities. The School plays a very active role in a dense network of stakeholders and actors.

Curriculum: Studio projects and history/theory classes increasingly present the work of the architect as a dynamic mediation of an extremely wide range of forces, institutions, and forms of expertise. Juries increasingly feature an array of outside guests, from the usual set of teachers and practitioners to newly-included consultants, planners, clients, community groups, non-for-profits, research foundations, and public agencies.

Exhibition and Publication: GSAPP student work and initiatives are increasingly exhibited and presented off campus and in professional settings. Student design work is often shown at the Center for Architecture, the Architectural League of New York, and the Van Alen Institute—all strong centers of professional collegiality and exchange in the city—and the school frequently collaborates with the Museum of Modern Art and the New Museum. Students have also contributed and shared a great amount of knowledge, in the form of presentations and white papers at national conferences such as ACADIA. These centers form a clear link between academic, professional and cultural spheres. Students have also exhibited their work at the Milan Furniture Fair, ICFF in New York, even film screenings and are regularly featured in a wide array of national and international magazines. Almost all of the faculty are the subjects of national and international exhibitions and publications.

Some examples of work that has been showcased by students concurrently enrolled full-time.

- Miles Fujiki (M.Arch ‘14), Student work from Spring 2012 studio with Karla Rothstein chosen as part of the New York CityVision competition, winner of the Farm Prize
- Timothy Bell (M.Arch ‘12) - Student work selected as part of first phase of finalists in the AIANY Haiti Housing Collaborative competition (2011)
- Madeeha Merchant (M.Arch ‘14) - Publishes “Alienatory Processes in Architecture” part of thesis work conducted with Professor Michael Young in Volume #32
- FY-Langes (first installed outside of Avery during graduation) Exhibited as part of FIGMENT NYC on Governor’s Island (June 2012) [Rand Abdul Jabbar (M.Arch ‘14), Aisha Alsager (MsAAD ‘12), Susan Bopp (M.Arch/MsHP 14) Justin Fabrikant (M.Arch ‘12), Rikki Frenkel (M.Arch ‘12), Joanne Hayek (MsAAD ‘12), Electra Kontoroupi (MsAAD ‘12), Mark Pothier (M.Arch ‘14), Nicholas Reiter (M.Arch ‘13), Jennifer Romeo (M.Arch ‘12)]
- Joseph Justus (M.Arch ‘12) - Japan: Disaster and Recovery, photographs exhibited in Avery Hall

- Collin Anderson (M.Arch '13) – Completed a monograph on DP Architects
- Nicholas Reiter - Video of subways part of a finalist exhibition in the Architecture MN video competition
- Courtney Hart (M.Arch '11) - "Organelle". an interactive project installed as part of Nuit Blanche (Fall 2011)
- Damon Lau (M.Arch '13), Cheng Lee, Rebecca Marriott and Kim Nguyen (M.Arch '14) - Winners of the Grand Prize in the 2011 Visualizing Marathon (coordinated by Sarah Williams, SIDL)

Applied Research: Much of the GSAPP outreach and engagement with the profession and wider communities has centered on applied research work that brings the school into close collaborative contact with a wide range of different workplaces and stakeholders.

Summary of Self-Assessed Areas of Concern

Financial Aid: GSAPP needs to increase the amount of financial aid offered to ensure that applicants with less means are able to come to the School. With the formation of the office of Development and Alumni relations at the School, and the establishment of a scholarship fund for financial aid, and a dean's quasi-endowment for financial aid, this project is underway.
Currently, Forty-eight percent of all MArch students receive financial in the form of institutional scholarships. Twenty-six percent of theMArch student body receives financial aid in the form of teaching assistantships or readerships. Approximately 60% of the student body receives federal financial aid in the form of loans or work-study.
There is particular concern for international students who are not able to use the same system of loans as students from the U.S. and are often coming from economies that do not have the resources to support them.

Space: All schools at Columbia operate within less space than their sister schools at other institutions. The metropolitan density characteristic of the city as a whole is a feature of the Columbia inner campus and part of the University's attraction. GSAPP uses its space extremely efficiently around the clock and actively treats density as an asset, producing a stronger sense of collective identity and collaborative intensity, and maximizing cross-fertilization between students and programs. The School thrives on this metropolitan energy but will need more space to support its expanding mission. While the School has recently added extra facilities, it needs to add further studio, seminar, office and research spaces to better realize its expanding set of pedagogical ambitions. A major goal for the school is to upgrade its core studio spaces. Faculty have been studying the issue while funds are being set aside for the project. As neighboring schools move to the new Manhattanville campus in the coming years, the school hopes to gain substantial additional space in the vacated neighboring buildings to address its needs.

Diversity: GSAPP would like to increase the proportion of minority students, particularly African-Americans, in the M.Arch. Program. It would also like to increase the proportion of women teaching in the Building Technology classes and in the IT team, to counter stereotypes and provide strong role models for faculty and students. We are please that the last two hires in IT

have been hightly qualified women. While 41% of Design Studios and 50% or History/Theory classes are taught by women, the proportion is significantly lower in Technology related areas. Recent trends have been very promising, with a new generation of technology teachers and IT experts with women rising rapidly through their respective teams, but greater progress in this area is desired.

Program Integration: While the different dimensions of the curriculum are more integrated than ever, the School seeks an even greater level of integration. In particular, it is concerned to link the history/theory classes more closely to the design studio classes to increase the exchange of knowledge in both directions. With the school assuming an ever greater responsibility to the global conditions of contemporary architectural practice, faculty are looking to structure the way the history/theory curriculum can provide a focused platform to prepare students for their research trips to global sites. In reverse, the faculty is looking to integrate the lessons learned on the global research trips into the history/theory curriculum. Given the fact that this issue is a concern for the discipline at large in an age of global practice, faculty are looking to refine the curriculum in ways that enhance the level of education and provide leadership in this area.

I.2. Resources

I.2.1. Human Resources & Human Resource Development

Faculty and Staff

The Graduate School of Architecture, Planning, and Preservation has an administrative staff of 64, 51 of whom serve the Master of Architecture Program directly or indirectly. This includes an IT staff of 11, a Dean's Office/Student Affairs office staff of 11, a Finance office staff of 7, a Publications office of 5 (including print, web and digital publications), an Events office staff of 2 and a staff of 4 involved in fabrication and fabrication research. The School has a Development and Alumni Affairs office of 7. A list of all administrators with titles and essential functions will be provided in the Team Room.

There are 21 full-time and approximately 175 part time faculty teaching in the Master of Architecture program in 2012-2013. A matrix of the faculty and their courses as well as a *curriculum vitae* for each faculty member is appended to this document.

EOAA, Diversity

GSAPP fully embraces Columbia University's commitment to appointment, promotion, and retention policies that achieve and maintain a diverse faculty, administration, and student body. As stated by President Lee Bollinger,

> *The importance of Columbia's Affirmative Action Program extends far beyond its objective to provide equal opportunities for those seeking employment at the University. It is an essential part of our mission as an educational institution. I believe strongly that diversity and excellence are inextricably bound, both in education and society. For our*

students to understand and inquire about the world they inhabit in its full richness and complexity, they must be exposed to teachers, scholars, and staff of diverse backgrounds and perspectives. This is true for students everywhere, but especially so for those who live and study in New York, the most diverse city in the country, if not the world.

The Office of Equal Opportunity and Affirmative Action annually publishes *The Affirmative Action Program for Columbia University* to declare Columbia's commitment to equity and diversity in hiring and to a working environment devoid of discrimination and harassment. This document charts Columbia's progress as an employer over the past year and sets new goals for the year ahead based on the unique conditions in each field and the School adopts those goals. A copy of this plan will be provided in the team room.

The work of this office was augmented by the Office of the Vice Provost for Diversity Initiatives. Established in September of 2004, the founding mission of this office was to increase substantially the representation of traditionally underrepresented groups on the faculty and in the senior levels of administration. In addition, the office seeks to link hiring initiatives to curricular and programmatic change and promotes scholarly efforts to understand the challenge of diversity in the global context of the 21st century. The office insists that "educational excellence and social justice are intimately connected." and is committed to "not only changing the demographics of the University, but also its way of creating knowledge so that, for example, scholarship on race, sexuality, gender, ethnicity and religious difference is put at the center rather than at the margins of our intellectual endeavors." The School works closely with the Provost's office to monitor its progress and achieve its goals in this area. Our School has been represented on the University's Professional Schools Diversity Council by Professor Laurie Hawkinson. The Diversity Initiatives Office maintains a website with a comprehensive list of Resources for Faculty and Graduate Students, Data, and Links to other pertinent sites. Some of these resources have been allocated to the School over the last years to assist in faculty recruitment, research projects, etc. Columbia University treats this issue as fundamental to its future and the Provost's office recently carried a detailed multi-year analysis of all women and minority appointments across the University in order to develop a new set of policies and GSAPP was seen to have one of the very best records and be the most successful in pro-actively addressing this issue over the last 7 years. In 2011 the University instituted in 2011 an Office for Academic Planning, replacing and expanding the Office of the Vice Provost for Diversity Initiatives, with the mandate to devise new strategies for strengthening both faculty and student diversity. One of this office's initiatives has been to require that each School at the University develop a Three-Year Diversity Plan for enhancing faculty and pipeline diversity and inclusion. The School's 3-year diversity goals aim to continue to build upon and refine these efforts and to embark upon new initiatives. Specifically:

- *GSAPP will continue and expand upon a successful process of faculty recruitment that enhances diversity.*
- *GSAPP will continue to enhance the success of junior faculty through the allocation of resources for faculty development.*
- *GSAPP will continue to establish academic initiatives that reinforce diversity as a crucial dimension of cosmopolitan urban life, as, for example, in reimagining and transforming the initiative formerly known as the Urban Technical Assistance Project (UTAP).*

GSAPP's submission was considered to be a strong plan by the University. A copy of the entire plan will be provided in the team room.

Over the past ten years GSAPP has benefited from a faculty that has become increasingly diverse. Of our 33 current full-time faculty members, 15 are women and 11 are members of minority groups. This population has been achieved through an ecological process that has included a significant number of strategic new hires, professional development opportunities and access to GSAPP's increasing international presence through the establishment of a growing number of research facilities across the globe. In terms of Master of Architecture program, two of the 21 full-time faculty are African-American (10%) three are Hispanic/Latino (14%); and 11 are women (52%). As a point of comparison, the NAAB 2010 Report on Accreditation in Architectural Education reports a the gender breakdown in accredited schools is 26% women. This same report indicates that 3% of faculty reported as being Black or African American and 7% of faculty reported as Hispanic/Latino.

The M.Arch program's student enrollment by gender has historically been relatively well-balanced and has become more so in recent years: for the five year period beginning in 2007, the male/female percentages are 57%/43%; 54%/46%; 54%/46%; 48%/52%; 49%/51%. Thus the percentages of female students has been somewhat higher than the average of 41% reported in the 2010 Report on Accreditation in Architecture Education. The student body of the M.Arch program and the School as a whole benefits from a considerable international presence which contributes to its diversity. Nonetheless, the School is still seeking to find ways to increase the number of African American and Hispanic/Latino students in all of its programs. Active research labs, like the Global Africa Lab, the Latin Lab, and the China Megacities Lab, along with the global network of Studio-X facilities, make diversity and social justice central themes and aspirations of the School. GSAPP has also broadened its initiatives beyond its own faculty and students, feeling responsibility to the wider field. The HBCU program directed by Professor Mabel Wilson at GSAPP aimed at bringing gifted minority teachers from leading schools of architecture to teach at historically black colleges and universities has been very successful and is valued highly

Faculty Opportunities for professional development

GSAPP's policy on the review and reappointment of nontenured faculty provides for a one-semester paid leave for professional development after the faculty member's third year review by the Executive Committee (tenured faculty). This is designed to give the individual a solid block of time to act on the Committee's recommendations. Since the last visit, 8 faculty development leaves have been granted, 4 of which went to Architecture faculty. Tenured faculty are granted a sabbatical leave of one semester with full salary after 12 semesters of teaching. Other leaves are also available to faculty, such as exemption from teaching duties for a faculty member working on a funded research project. The School encourages the pursuit of funded research by both full-time and adjunct faculty. Junior faculty are regularly provided research funding for the first two or three year of their appointment, and are also provided appropriate computers, software and peripherals. Full-time and adjunct faculty are also encouraged to attend professional development seminars, workshops, and conferences and the School will normally support these endeavors financially by reimbursing for travel, accommodations, and registration fees. Faculty apply directly to the Dean's office for such funding. In addition five GSAPP faculty

members, including three from the Architecture program have taken advantage of funding from the Provost's Diversity Initiative as described above. A new initiative has recently been launched by the Provost's office to provide an even greater level of funding for faculty and post-doctoral research projects that further these diversity goals.

Faculty appointments, promotion, and tenure

GSAPP follows a regular process for the appointment of full-time faculty. Columbia University as a whole employs the online "Recruitment of Academic Personnel" (RAPS) system for faculty hires. Each school at the University is required to act in accordance with a Search Plan approved by the University's EO/AA office and the Provost's office. This search plan documents standard language for all job advertisements, required and optional venues for these advertisements, and guidelines on the makeup of the search committee, and a timetable for conducting a search. The University also provides for variances from these policies if, for example, a special opportunity arises to hire an individual who would contribute to the diversity of the existing body of faculty members.

Once a faculty member is hired, one member of the Executive Committee (tenured faculty) is designated as the person's overall advisor. The School's Executive Committee follows a regular schedule of reviews for full-time non-tenured faculty, beginning with a first year review in the fall of the second year, wherein one member of the Architecture faculty reports on the individual to the full Committee. This is followed by a Third year review in Spring of the 3rd year to review in depth the faculty member's accomplishments and progress, being provided with a dossier from the faculty member. Following this review, the individual is eligible for a one semester paid faculty development leave, as mentioned above. This is followed by a Sixth Year review which begins in September of the sixth year. This review examines the faculty member's dossier in depth, its ultimate goal is to determine whether or not the School will put the candidate forward for a tenure review by the University. The full policy for junior faculty review and reappointment will be provided in the Team Room.

Columbia University has recently moved to a standing committee model for tenure reviews, that is, in place of the traditional system of appointing five members ad hoc to a specific faculty member's tenure review. The standing committee – the Tenure Review Advisory Committee (TRAC) - consists of 13 tenured faculty from around the University. Five members of this committee are assigned specifically as reviewers of each tenure case, but the case is presented to all 13 members for a vote. The process continues to incorporate letters from outside reviewers and a detailed report from the School that includes a candidate's statement, an assessment of the candidate's role at GSAPP, student evaluations, and a complete portfolio of the candidate's scholarly and professional work. The complete University document will be provided in the Team Room.

Admissions Requirements

Please see part 2.3.

Evaluation for Admission

There is a confidential review process for each application which consists of an evaluation of intellectual, visual, architectural potential by at least three GSAPP Architecture

faculty members and one third-year M. Arch. student. Each individual reviews the material independently and assigns a numerical score for each category. A 450 verbal GRE minimum is required for an application to be reviewed, 550 is the recommended score for admission. International candidates for admission must produce a TOEFL score of at least 100. Admission is need blind and financial aid is need-based. The admissions and financial aid process are entirely separate and those reviewing the application make their evaluations independent of any financial information.

M.Arch Advising

Student and Academic Advising

The GSAPP Administration maintains an Open Door Policy and architecture students are encouraged to visit the Student Affairs / Admissions Office in 400 Avery Hall daily between 9 am and 5 pm for guidance and support.

Advising at the GSAPP is multifaceted and one is always adding to her or his network of advisors. Advisors are not only individuals who formally hold that title; throughout students' years at the school, they will seek and receive mentorship and support from their professors, administrators, staff and classmates. Likewise, the GSAPP Student Affairs Office liaisons with multiple University wide student services and offers additional avenues of support for GSAPP students.

Students meet with upper class student advisors, studio critics, the Dean of Students, the IDP Coordinator, alumni, the Development Office staff, at the following required advising sessions:

- Curriculum Advising with the Dean of Students, Faculty + Distributional Advisors

Following the completion of Core Studio I (Fall Term 1), first year March students sign up for a curriculum meeting with the Dean of Students to coordinate their academic schedule for the three-year M. Arch Program. Students who require more focused studio/ history theory or building technology advising will be directed to the appropriate faculty member.

Also, during the first week of term, the directors of the required distributions and individual faculty members present the curriculum and their courses at the Building Technology and Visual Studies Presentations. The History Theory and Building Technology faculty schedule sessions to discuss waivers, advanced standing and are available throughout the semester for guidance. Similarly, individual roving engineers are assigned to Core and Advanced students and available throughout the year.

Prior to registration for Advanced Studio IV (Fall Term 5), all third year MArch students meet with the Dean of Students to verify all graduation requirements will be fulfilled.

- Peer Advisers

Following the completion of Core Studio I (Fall Term 1), an All MArch meeting is held. This event is run by students for students. No administration or faculty is present. Upper class students take this opportunity to mentor and openly share their experience with1st year students. In the past, issues concerning portfolio preparation, saving and organizing digital work, and comprehensive reviews have been discussed.

- Core Studio Curriculum Discussion

Following the completion of the Core III Studio (Fall Term 3), the housing faculty hosts an exhibition and/ or group review with second year Master of Architecture students. This event is meant to mark and celebrate the conclusion of the Core Studio Sequence and allow students and faculty an opportunity to discuss expectations for the Advanced Studio Sequence.

- Comprehensive Studio Review

At the conclusion of their second year of study (Spring Term 4), students produce a comprehensive studio portfolio, and meet with an assigned group of faculty members for a Comprehensive Review of their work in Core Studios 1, II and III and Advanced Studio IV. During the Comprehensive Studio Review faculty will use an evaluation form /checklist that provides a structure within which reviewers may thoroughly and consistently discuss the student work. Comprehensive review discussions attempt to briefly convey to each student the general impressions of the faculty about his or her design work and make suggestions on how to prepare for the remaining design studios. In those cases where student progress is deemed unsatisfactory, the review committee may recommend and/ or require one or more of the following actions:

1. That the student complete additional design work before advancing to the next term;
2. That a tutor (peer or faculty) be assigned to the student;
3. That a failing grade be given for Advanced 4, even if no warning letter was sent.

M. ARCH PROGRAM REQUIRED ADVISING SCHEDULE

Year	When	Type	With	Format	Requirements
1st Year	FALL	Individual	w/ Dean of Students and Faculty	Curriculum Advising	NA
	SPRING	Group	w/ M.Arch II + III Students	Portfolio Workshop - Student to Student Advising	NA
2nd Year	FALL	Group	w/ Studio Faculty	Core Studio Discussion	NA
	SPRING	Individual	w/ Studio Faculty	Comprehensive Studio Review	Portfolio Required
3rd Year	FALL	Individual	w/ Dean of Students and Faculty	Transcript Review	Transcript Supplied by Admission's Office

M. ARCH PROGRAM REQUIRED ADVISING SCHEDULE

Year	When	Type	With	Format	Requirements
	SPRING	Individual Submission	Faculty	Portfolio Review	Portfolio Required

Advising at the GSAPP is meant to help guide students in their journey within the GSAPP and beyond. To this end, the IDP Coordinator and Office of Alumni and Development Affairs also organize professional development, career counseling, portfolio, and interviewing events.

Portfolio Reviews
Multiple portfolio events are held each semester by the Advanced Studio Coordinators, Office of the Dean of Students, Student Council, alumni, and Office of Development to aid MArch students in the development of a portfolio. Portfolios are reviewed bi-annually by studio critics, as well as at the end of the Core Studio Sequence in a Comprehensive Review format where student work is evaluated by multiple studio critics. In addition, prior to graduation, students are required to submit a portfolio of representative work from each semester.

Evaluations
At the conclusion of each studio the studio critic completes an evaluation form. Copies of evaluations are kept in the student files, and may be requested in the Student Affairs / Admissions Office, 400 Avery Hall.

STUDENT TRAVEL

The School is the beneficiary of a considerable bequest from the late William Kinne that has as its purpose the enrichment of students' education through travel. This bequest supports student travel in a number of GSAPP's programs, as well as competitive travel grants for graduating students. In recent years, this bequest has been supplemented through fundraising to accommodate the rate of increase in travel costs and to support additional travel opportunities for students.

M.Arch. students are eligible for a one-time, individual, noncompetitive funding for school-sponsored travel to one of the GSAPP's Studio X locations during the final semester of design studio. Stipend amounts are based on actual cost, but average approximately $2,000 per student. Trips are normally scheduled in the spring during the week before the University's spring break. The School also sponsors other studio or seminar-based travel. In addition, it offers a number of summer international workshops for which particpants are funded. A comprehensive list of travel destinations is found as Appendix 10 and workshops are found as Appendix 11. Site

visits for design studio, technology classes, or other similar trips are also supported by the School.

GSAPP also support student research and professional initiatives, whether in the form of independent study projects for academic credit, or student group activities such as those of Green Builders @ Columbia.

IDP activities at Columbia are led by Professor Paul Segal, who teaches our required Professional Practice course. He is in regular communication with students both through scheduled office hours and email communications throughout the year. In addition to the IDP presentation scheduled each year in his Professional Practice course, he schedules several other relevant presentations and is the faculty advisor for the two students who serve as career service assistants. Career Service activities this past year included maintaining active job postings on the School website, 4 lunchtime lectures with professionals, a portfolio review and two 2-day Career Fairs, and a special Revit Tutorial.

Events:

Please refer to Appendix 7: Events for a complete list.

Exhibitions:

Please refer to Appendix 6: Exhibitions for a comprehensive list.

I.2.2. Administrative Structure & Governance

The Master of Architecture Program is the flagship program of the Graduate School of Architecture, Planning and Preservation, which is one of 16 schools of Columbia University. The Program is administered by a team of faculty members, each having responsibility for one sector of the curriculum but working as part of an organic whole:

Michael Bell, Core Studio Director
Laurie Hawkinson, Advance Studio Director
Laura Kurgan, Visual Studies Director
Philip Anzalone, Tech Sequence Director
Paul Segal, Professional Practice Director/IDP Coordinator

Each director is responsible for curricular offerings, staffing (including recommending new adjunct hires to the Dean), etc. They are supported by GSAPP's overall administrative staff, led by David Hinkle (Associate Dean: faculty affairs, student teaching assistantships, student travel, student event support) Danielle Smoller (Assistant Dean of Students: admissions, financial aid, academic advising, registration), Janet Reyes (Associate Dean of Finance: budget, payroll, expenditures). Other key positions include John Ramahlo (Executive Director, IT) and Mark Taylor, (Director of Operations). This dedicated group of individuals has been with the School for a considerable time period (between 6 and 33 years). The program also has an administrative assistant with several work-study students for day-to-day needs.

In addition to regular meetings of the Executive Committee, Architecture program faculty meet as a body at the beginning of each semester, as smaller groups as needed throughout the semester (e.g. meetings for faculty teaching each particular studio semester, tech faculty meetings). In addition, as described above in section I.1.4, task forces made up of a small group of faculty and sometimes the entire body of faculty members meet to focus on curricular or other issues. As indicated in Section I.1.5 above, a student Program Council serves as a link between the student body and the administration. Members of the student body are elected each year by the students to serve on a student Program Council. The Architecture Program Council consists of two students elected from each year of the Master of Architecture Program, two students from the Master of Science in Advanced Architectural Design Program, two from the Master of Science in Architecture and Urban Design Program, and one from the Masters in Critical, Curatorial, and Conceptual Studies Program. This body is tasked with meeting independently with the entire student body several times a semester and then with the Dean and other members of GSAPP administration, and is charged with bringing student issues and suggestions to the attention of GSAPP's administration. These issues range from suggestions on curriculum issues, IT needs, facilities issues, and the like. Other responsibilities of the Council include the administration of the studio lottery system each semester.

The Master of Architecture Program is one of seven degree programs in GSAPP. Other programs are: Master of Science in Advanced Architectural Design (3 semesters), Master of Science in Architecture and Urban Design (3 semesters), Master of Science in Critical, Curatorial, and Conceptual Studies (2 years), Master of Science in Urban Planning (2 years), Master of Science in Historic Preservation (2 years), and Master of Science in Real Estate Development (3 semesters). The Ph.D. programs in Architecture and in Planning are run by the school as a

division of the University's Graduate School of Arts and Sciences. In recent years the school has initiated two pilot programs. One, the Global Metropolis program, is a variation of the existing AAD program that concentrates on Global Cities, using New York and Moscow as its key refrerence points. The other, the Advanced Architectural Research (AAR) option, offers a small set of graduating students to apply for the opportunity to return fo the school to do a one year supervised advanced research project.

I.2.3. Physical Resources

Most of the school is located in its own building, Avery Hall, and in connected adjacent buildings: the 200 and 300 level of Fayerweather Hall and the Underground Avery Extension, and the 100 and 600 levels of Schermerhorn Hall. This complex houses design studios, classrooms, computer labs, exhibition galleries, the Avery Architectural Library, a slide and video library, audio-visual facilities, 3d printing and 2d printing shops, GIS lab, a casting space, a small café, faculty and administrative offices, six rooms of various sizes for juries and lectures, and two lecture halls, equipped for multimedia and video presentations including interactive video conferences. Some faculty offices, two jury/seminar rooms, three galleries, and the Buell Center for American Architecture, are located nearby in Buell Hall, which also houses the Maison Francaise. The School's Arthur Ross Gallery, a museum-quality gallery devoted to architectural exhibitions, is located on the first floor of Buell Hall. The School also has research and office space on Claremont Avenue and downtown commercial office space to headquarter a set of its research labs and to facilitate collaborative faculty projects and interaction with the local professional communities. In addition the school has a network of event-research-exhibition spaces in key global cities around the world.

(See plans of the School's facilities in Appendix 16: Plans of the School's Facilities.)

Studios

The studio spaces for the M. Arch. Program are located on the 500, 600, and 700 levels of Avery Hall, two per floor. These are open, well-lit rooms allowing each year of the three-year M. Arch. Program its own space, while affording considerable possibilities for interaction in the common gallery spaces between. Nearly all students work in studio in proximity to each other, which fosters *esprit de corps* and interaction. All of the desks for second and third year students are equipped with state of the art computer workstations. In the first year studios, there is one state-of-the-art workstation for every two students.The 3d and 2d printing and laser cutting workshop is now housed in a new expanded space on the 100 level and maximizes the fluidity of the feedback loop between faculty and students, with hand drawings, print-outs, videos, digital and physical models being generated in parallel. The studio on the 100 level of Schermerhorn Extension is used in the Spring semester for advanced studios (like the C-BIP studio) using specialized software and teaching inputs.

Avery Architectural and Fine Arts Library

Avery Library is central to GSAPP life, with its unparalleled collection of books and journals and the archives of drawings, manuscripts, documents, letters, photographs, material samples and ephemera. In addition to the reading rooms, stacks, carels, administration, copy, photography and scanning rooms,the library has extensive offsite storage for its vast holdings. Avery Hall celebrates its 100th anniversary this year – the historic McKim, Mead and White reading room of the library was restored in 2003, concurrent with construction of the Miriam and Ira D. Wallach Study Center. The architectural firm ARO was commissioned in 2007 to conduct a Phase 2 program plan for the renovation of the 1970 underground extension. Proposed renovations were not approved and changes in Avery Library administration stalled further discussion of renovation for some years.

Laboratory for Applied Building Science

The new Laboratory for Applied Building Science is the entity at the GSAPP which incorporates research, teaching, and physical facilities that are involved with full-scale design and production in GSAPP's educational units.. The physical facilities on the Columbia University campus as follows:

- 153 Schermerhorn Extension: Fabrication Lab
- 100 Schermerhorn Extension: Casting / Welding Space
- 157 Schermerhorn Extension: Offices
- 321-M Fayerweather: Material Library

The Fabrication Lab houses the School's computer numerically controlled (CNC) machinery and traditional wood and metal working machinery. Within the facilities the School has:

- Techno-Isel LC Series 48"x 96" 3-axis router system with 3.5 HP spindle and 10HP vacuum pump
- Techno-Isel Gantry III Series 24"x30" 3-axis router system with 3.5 HP spindle and oil-cooled automated lubrication equipment
- Techno-Isel Gantry III Series 24"x30" 3-axis router system with adaptable router spindle system
- Techno-Isel Gantry III Series 48"x48" 2-axis plasma cutting system
- Atek Bantam four-foot 12-ton Pneumatic Press Break
- SawStop table saw
- Dust collection systems for the large CNC router, table saw, band saws, and sander
- Ingersoll-Rand 210 psi air compressor
- A variety of power saws, drills, routers, planers, and other tools and instruments for use with wood and soft metals
- Various hand tools, hardware, and consumable materials (sandpaper, glue, screws, nails, etc.)

Integral to the physical facilities for production is the digital infrastructure for the design and analysis component, which includes:

- Three workstations containing software as located in the design studios
- Full wired and wireless connectivity throughout the Lab
- Five seats of MasterCAM X CAD/CAM software
- Ten seats of SolidWorks parametric solid modeling software
- Unlimited seats of Rhinocam CAD/CAM software

A shop technician is on duty during shop hours to give instruction in the use of tools and to monitor safety. The plasma-cutter is in a fully isolated space for ventilation and optical protection. All students have access to eye-protection, dust masks, hearing protection, aprons, and gloves.

The Laboratory for Applied Building Science offices are located adjacent to the Fabrication Lab and have space for the Director and the Managers to work, as well as one workstation for Research and Teaching Assistants to work. There is a small reference library, storage of materials and supplies and other support space within the Office.

Casting Space

The Casting / Welding Space offers an isolated location to perform welding, casting of concrete and plaster as well as vacu-forming. The room is equipped with safety equipment for welding (masks, sleeves, curtains, gloves, etc.). The room houses a mig-welder along with two welding tables, rotational-molder, 1 gallon vacuum chamber, a vacuum former, sink and counterpace for casting.

Material Library

The Material Library on the mezzanine level of Fayerweather Hall houses samples of products, raw materials and assemblies for the GSAPP curriculum. Faculty members can choose materials for discussion during courses and store materials for subsequent years in the space and students can look at all the samples

Conservation Laboratory

The Conservation Laboratory in Schermerhorn Extension serves as the primary teaching venue for conservation courses where lectures, demonstrations, and practicums take place. It supports such courses as Structures, Systems and Materials I&II; Architectural Metals; American Architectural Finishes; Concrete, Cast Stone & Mortar; Stone, Brick & Terracotta; Conservation Workshop; and is the fundamental locus for Basic Conservation Science and Laboratory course. Thesis research is also conducted in the laboratory.

The Historic Preservation Program collaborates within the University with the School of Engineering and the Graduate School of Arts and Sciences and enjoys close associations with New York University's Conservation Center, the Metropolitan Museum of Art's Department of Scientific Research and Princeton University's Materials Institute. Within the Conservation Laboratory itself and through these associations the following resources are available for teaching and research:

- Philips 1710 Open Architecture X-ray Diffractometer
- Philips 1840 X-ray Diffractometer
- Bruker Portable X-ray Fluorescence Spectrometer
- Bruker Artax X-ray Fluorescence Spectrometer
- Zeiss Axioplan 2 Polarizing Light Microscope (transmitted, reflected and UV light sources)
- X-Rite Spectrophotometer/Colorimeter
- INSTRON 4201 Mechanical Analyzer
- Bruker Vertex 70 FTIR Spectrophotometer and Microscope
- Bruker Ramanscope
- LEO 1455 VP Scanning Electron Microscope with Oxford WDS 400 and EDAX 7366
- Accumet 50 pH-Conductivity Meter
- Agilent GC 6890 and MSD 5973 with a Frontier Double-Shot Pyrolyzer 20-20 iD
- Zeiss Axiovert 405M Metallographic Microscope
- Stuers Accutom 50 Precision Cut-Off Saw
- Reichert-Jung 157207 Wood Identification Sampler
- Varian Cary 50 BIO UV-Vis spectrophotometer

In addition, laboratory work for the Conservation Workshop has benefited New York City Historic House Trust sites such as the Van Cortlandt House Museum, the Bartow–Pell Mansion, King Manor, and Russel Wright Design Center in Garrison, New York.

Finally, in collaboration with Save Ellis Island a summer workshop for New Jersey high school science teaches was held in the program's Conservation Laboratory

Arthur Ross Architectural Gallery

The core of the exhibition program at GSAPP is the Arthur Ross Architecture Gallery, one of the few spaces for architectural exhibitions in the country with museum grade climate control. The gallery is nearing completion of an extensive year long renovation that has removed and replaced all of its floors, walls and ceilings, has installed a museum quality LED lighting system, and has updated all electrical and digital services. The renovation has also expanded the area of the gallery, allowing shows to extend to the adjacent front lobby and South Gallery of Buell Hall, and has connected these spaces with new glass entrances. The sum impact of the renovation will be a more functional gallery and more visibility for the gallery to the GSAPP community, to the university, and to the city, marking its importance among architectural research galleries and experimental architectural installation venues.

Temple Hoyle Buell Center for the Study of American Architecture

The Temple Hoyle Buell Center for the Study of American Architecture, directed by Prof. Reinhold Martin is offered as a reading room and “home base” for the PhD program. Located on the third floor of Buell, The Center was recently renovated with an open layout to serve as a public meeting space and reading room, primarily used by the students of the PhD program.

The Center is currently in the process of renovating the Buell Seminar Room on the third floor. The new design will offer a kitchen and high-quality seminar room for Buell events and will be shared with GSAPP administration such as the Development office for their use. Conceived as one of several high-quality, high-tech meeting classrooms that exist on the Columbia campus and within its global network that together create a series of spaces conducive to facilitating dialogue and debate amongst students, faculty, and the public, the program of the space will be flexible enough to maintain its use as a classroom, but it will also be capable of hosting board meetings, small lectures or other such gatherings.

Spatial Information Design Lab

The Spatial Information Design Lab functions as the GSAPP resource for GIS data. It is located on the 600 Level of the Schermerhorn Extension and is networked to the main Avery server where its data is stored. All students have access to the GIS X Drive where they can find the whole collection of spatial resources, as well as tutorials to provide the necessary tools for a basic understanding of the software. Data is updated each year depending on the needs of faculty studios and faculty research. There are four computers, which are shared by around eight or so research students throughout the year working on the funded projects. These same computers are shared as well by the student GIS TA who is appointed each year, and the GIS/Datavisualization Specialist who administrates and maintains the spatial resources as well as participates in funded research and teaching. The workstations are shared as well by the lab directors, who have their own laptops.

Funded projects include included a collaboration with the Earth Institute on a project about transportation in Nairobi, with the Guggenheim museum in connection with a seminar called Stillspotting NYC which resulted in student work being displayed on the Guggenheim

Website. Two more seminars, Cell City and Crowd-Sourced City have also been funded by Telefonica, Navteq and Nokia. The lab has also had independent research funded by the Rockefeller Foundation, The Open Society Institute, the JEHT Foundation all of which point towards it becoming a larger resource for the GSAPP as a whole. Most recently SIDL is part of the Advanced Data Visualization Project, which will bring another staff member on board for another year.

Computing Facilities

There are five studios in Avery (700, 600S, 600N, 500N, 500S), one studio in Schemerhorn Extension and four labs in Fayerweather (Urban Planning, Historical Preservation, Real Estate Development, and 202 Fayerweather). These house over 450 high-end computer workstations with a full complement of computer software including 3D design, video editing, and presentation design capabilities. Each floor has access to color and B&W printing (there is a color printer on 700 and one B&W and one Color printer per floor on 500 and 600. 202 Fayerweather has one color and one B&W printer as well. Students are allotted 1300 pages of B&W printing per semester and 100 pages of color printing (1 page= 1 side of an 8.5x11 sheet) and more can be purchased as needed. Additionally, a large project is being completed in the Urban Planning and Historical Preservation studios where the pre-existing network infrastructure has been replaced with an all new and upgraded gigabit (1000base-T) infrastructure (replacing the 100base-T and 10base-T network that was in place), allowing significant improvements in performance for all the workstations in terms of file transfers/sharing between student workstations, network licensing, and between student workstations and servers 202 Fayerweather is slated for a similar upgrade soon.. Networked computers encourage students to take advantage of computer workstations all over the building. Finally, all the School's labs have wireless network access via the University's wireless network infrastructure.

The progressive upgrades to the physical spaces throughout the school have been matched by an upgrade of the entire electronic infrastructure to provide a state of the art audio-visual, computer aided design, and communication system throughout the School. There is a greatly improved array of audio-visual, computing, networking, wireless, modeling, 3d and 2d printing, laser cutting, and CNC fabrication equipment. Having pioneered the role of computer-aided design in architectural education, the School provides a state-of-the-art electronic design environment.

Digital Output Shop

We have three HP 5500 PS plotters and one HPT7100 plotter, offering professional quality output at a significantly reduced cost (charges are based on cost of materials and do not reflect maintenance costs for equipment or costs associated with staffing the facility). We have two HP 5550 Color Laser Printers and two HP 6015x color laser printers and students are allocated 100 pages per semester. More can be purchased as needed.

Additionally, we have upgraded to four rapid prototyping machines (a Z-Corp zd510 color 3D object printer, a new Dimension SST 1200 ABS plastic printer, and 2 Dimension uPrint ABS printers) which are available to all students for printing models/parts. An additional MCOR 3-D printer that uses paper is slated to be added by summer of 2013.

Finally, we have three Universal Laser Systems laser cutters: two x-660 single beam 60w systems (32"x18" work/cutting area) and a x2-660 dual beam cutter (two 60w lasers and a 32"x18" work area). The x2-660 can be used for faster cutting using independent beam control or for cutting/etching harder or thicker surfaces using dual-beam focusing technology. The shop is

managed by a single full-time employee but is largely staffed by student assistants (giving them first-hand experience with the technologies offered). All output from the shop is priced on a per print/cut basis and no annual lab/usage fee is collected or required.

Audio-Visual Equipment

Rooms 113, 114, 115, the RED classroom space and Ware have built in projection and computer equipment at a standardized podium. Rooms 504, 505, 408, 300 Avery have permanently mounted projectors as do 200 and 300 Buell. Other rooms, such as 412, 300 Buell, the back meeting room in RED, the UP and HP studios and 320M Fayerweather, have large wall mounted flat screen TVs in lieu of projection and a single digital classroom at 202 Fayerweather with approximately 20 workstations and a projector for classroom teaching. The AV office maintains a large volume of digital equipment available for loan to students, including 20 projectors, 11 laptop computers, eight digital still cameras, 13 standard DV video cameras, one HD video camera, and one broadcast quality DV camera. In addition, we maintain a complement of digital audio recording devices (a portable DAT recorder, a personal voice recorder, and a professional digital portable recorder), slide projectors, and our main auditorium is equipped with three cameras and multiple microphone inputs which allows us to record all of the lecture events that take place in this space. We then archive them as DVDs which are available for to students via the Slide and Video Library. These DVDs are now uploaded to the University/school's iTunes and YouTube sites. We have also added LiveStream capabilities and have increasingly done lectures and graduation ceremonies via this new global and real-time channel.

The School also has the ability to simulcast events (video and sound) from our large auditorium to three other classrooms, as well as to the café area outside of the main auditorium. The capacity of the main auditorium is approximately 300 people but with our simulcasting capabilities we more than double the audience size. With the addition of LiveStream we have been accommodating a nearly unlimited audience. We have also participated as a simulcast site from events taking place at other locations around New York City by using video conferencing/simulcast technology (broadcasting the video and sound from an event at another site to an audience located in our main auditorium and vice versa). We have many professional quality plasma screens which are mounted throughout the school showing exhibitions, student work, live broadcasts of lectures, and other projects. The screens are typically 46" and above, most being 52 or 55". The 42" screens have become the sole prevue of exhibitions. The main screens for showing work are on the 400 level with an additional two located on the 100 level. In addition, the School has a digital computer microscope that allows images to be directly input from the microscope into the computer.

Website Infrastructure

Since the last accreditation visit, we have made numerous changes to the website capacity, personnel, and infrastructure, including a large capacity backup system, numerous additional storage servers (a GIS server with hundreds of GB of data usable by students, a remotely accessible FTP site to be implemented this fall, and a student data server with approximately 20Tb of network storage split amongst students, programs, and studios), and a climate controlled server room to house all of this equipment.

Additionally, we have made available to students an upgraded "renderfarm" (a cluster of machines that can render digital design jobs significantly faster than individual machines in the labs can and can also do so without impacting the performance of the student workstations, which allows them to continue to work while their project renders to its final form) with the use of

7 specialized rack-mount rendering computers from Boxx Technologies which are supplemented with older recycled machines as demand requires.

Recent and Future Changes to Physical Resources

The School continues to address the improvement of its physical resources in two ways: 1) upgrading its existing facilities, and 2) developing opportunities to add additional facilities.

Since the last accreditation visit, a new set of spaces have been added to address pedagogical and research goals, and major existing spaces have been upgraded. These include: a new Laboratory for Applied Building Science added in Schermerhorn Extension combining all digital and analog fabrication equipment with an adjacent office suite across the hall for the associated staff; a new expanded 2D and 3D printing and laser cutting workshop has been created on the 100 level; a new studio has been added and renovated in Fayerweather hall for housing the Historic Preservation Program, the Real Estate Development program now has its first dedicated space with specialized lecture theater and research/seminar space; the Urban Planning Studio has been renovated with a new division of spaces, furniture, computing, AV equipment, and technical support; the Arthur Ross Architecture Gallery has been substantially upgraded in all aspects with a major renovation and expansion with two new display spaces; a new suite of faculty offices and crit spaces has been added on the mezzanine level of Fayerweather; the whole 400 level of Avery has been completely refurbished with dedicated office suites for each program and administrative department; a new suite of research offices has been added just off campus on Claremont Ave; a new seminar/jury space has been created on the 300 level of Buell Hall the upgrading of the Buell Center has been completed with the addition of a small kitchen, and the major construction of the 8000 sq Center for Global Design and Development with high quality lecture, research, exhibition and seminar spaces on Amsterdam Ave is scheduled to be completed by the Fall of 2013. GSAPP has also established a downtown Manhattan event-research Studio-X space in an industrial loft building, Studio-X Beijing in a renovated factory in the inner city, Studio-X Mumbai in a top floor loft in the historic neighborhood near Victoria Terminal and Studio-X Rio is a four level townhouse in the historic Plaza Tiradentes, Studio-X Johannesburg is the floor of an industrial loft building in a new arts district, and Studio-X Istanbul is planned for a large ground-floor space on the waterfront. Amman Lab occupies studio, seminar, office and exhibition spaces within the Columbia University Middle East Research Center (CUMERC) while GSAPP maintains its satellite studio and seminar spaces in Columbia University's global center in Paris. Current priorities are to upgrade the studio spaces on the 500, 600 and 700 levels (faculty have been analyzing the potentials while funds are being set aside for the project), along with the smaller lecture theatre on the 100 level. The School is likewise developing a renovation plan for the bathrooms on the 400, 500 and 600 levels.

Avery Library is now fundraising to carry out phase 2 of its upgrades, having completed phase 1 of its major renovation, restoring the historic reading room on the ground floor and building the Wallach study wing. The library, which is also used by the Department of Art History, is funded by the University library system rather than by GSAPP. The current budget has limited annual allocations to incrementally refurbish areas of the library, however these resources are insufficient for the significant changes required to meet the current and future needs of our constituency. Special project funding and development efforts contribute some supplemental financial support and regular progress is being made. In the near future, we hope to renovate the

graduate reading room and the main 200-level reading room. In addition, re-purposing Wallach wing areas to accommodate ingestion of new acquisitions will also be underway in 2013-2014..

As noted in the self-assessment section, GSAPP awaits the movement of neighboring schools (like the Business school currently in Uris Hall) to the new Manhattanville campus in the coming years when the school hopes to gain additional space in the vacated neighboring buildings.

I.2.4. Financial Resources

The Graduate School of Architecture, Planning and Preservation (GSAPP) has undergone major transformation. Wide arrays of mutually reinforcing new opportunities have been created in the academic programs, research capacity and underlying fiscal structure. As a result, a more diversified and robust pedagogical, research and budgetary ecology has been established.

The School is attracting a higher quantity and quality of students across the board, an upgraded faculty and administration team, and a demonstrable increase in the quality of teaching and research. The restructured financial model increased efficiency and opened up new sources of income that enabled the School to rebuild its reserve to a healthy balance of [redacted] at the end of FY12. A portion of the reserve, [redacted], has been earmarked for renovation of the Studio spaces (with additional funds to be earmarked for that purpose in the next two years). We aim to maintain the reserve at the level of [redacted] given the need to absorb the historical unpredictability in student numbers, budget for unexpected major expenses, and the steadily rising burden of meeting the target of doubling the size of the full-time faculty over ten years along with the associated increases in staff, facilities, equipment, etc .

This positive swing of income versus expenses was accentuated by creating new efficiencies and income sources. Our tight monitoring of all financial transactions to maximize the efficient use of resources, robust development campaign, and a new emphasis on sponsored research has allowed much of the School-wide upgrading to be made without overburdening the budget. In the short period since the establishment of the new Development Office, the real success has been in the individual mid-size and major gifts, which are starting to arrive in significant amounts.

A major initiative in the School has been to establish a new network of global research labs, which involves a transformation of the overall curriculum, research capacity, budget, development, physical space, and communications effort of all programs in the School. This leadership initiative to establish a set of “Studio-X” facilities as key regional bases for the School began with the establishment of a successful pilot project in New York in 2008, and is progressing steadily with the formal opening in Spring FY09 of bases in Beijing and Amman. Similar bases formally opened in Mumbai and Rio in Spring FY11. Further sites in Moscow, Istanbul and Johannesburg are being established to complete the network. The resulting core network (USA, China, Middle-East, Latin America, South Asia, Russia, and Africa) establishes an unprecedented global think tank. Each of the interlinked Studio-X spaces has greatly enhanced the capacity, accomplishment and visibility of research by the School, as well as subsidizes much of the students’ international travel. Where this global network overlaps with the University’s Global Centers initiative, as in Beijing, Amman, Mumbai, Istanbul, and in the near future, Rio, positive synergies will be enjoyed by both the School and wider University. The established set of research units have started to subsidize some core operations. The annual operating expenses for these facilities are raised in the regions where they are based in a specialized campaign in collaboration with the University. The School has already experienced how the existence of the Global Network greatly facilitates general fundraising for the School itself, so it seems that the net financial gain for the School will match the major intellectual gain they create.

University overhead and common charges have increased consistently from FY06’s [redacted] to FY12’s [redacted] Although overhead School expenses have increased significantly, supporting grants and allocations from the University have remained at approximately [redacted]

The goal of the School's program of financial assistance is to provide financial aid to U.S. citizens and permanent residents who have demonstrated need consistent with University Guidelines. Financial Aid is met through a combination of grants/and/or loans. Forty-eight percent of all M.Arch. students receive financial aid in the form of institutional scholarships. Twenty-six percent of the M. Arch. student body receives financial aid in the form of teaching assistantships. Approximately 60% of the student body receives federal financial aid in the form of loans or work-study. A key budget priority is to improve financial aid to recruit the best students in all programs and excellent students from outside the United States. Financial Aid awards have increased from FY06 [redacted] to FY12 [redacted]

Having flourished in recent years, the School has strengthened its financial footing. As we look to future years, the current policy of close financial monitoring, increased sponsored research, and committed fundraising will balance the budget despite the predicted steady rise in faculty and financial aid costs. The School looks forward to fully maintaining its unique international leadership mission to reinvigorate all the expert fields devoted to the built environment.

I.2.5. Information Resources

Avery Architectural and Fine Arts Library

Founded in 1890, Avery Library is the world's leading architectural reference library. While Avery's primary constituency are the scholars and students in GSAPP and the Department of Art History and Archaeology, scholars worldwide rank Avery as the outstanding international research center on the history of architecture. Avery is one of the distinctive collections with the Columbia University Libraries (CUL) administrative unit, which itself is perennially ranked among the top research institutions nationally. With the extension of scholarly interests into increasingly inter-disciplinary areas of inquiry, our close integration with the Columbia libraries system provides seamless access to collections and services across all disciplines in support of the academic needs of our community.

Avery Library is staffed by 25 full-time employees and approximately 25 part-time (including contracted workers, interns, and students). Library administration is led by Carole Ann Fabian (Director) together with a senior leadership team comprised of six department heads: Access Services, Avery Index Editor, Senior Bibliographer, Curators of Avery Classics, Drawings & Archives, and Art Properties. The professional staff is comprised of ALA credentialed librarians, technical experts and disciplinary scholars. All departments also employee well-trained and effective support staff. CUL makes every effort to provide salaries commensurate with experience as well as opportunities for professional development. Revenues from the *Avery Index* and multi-year grant awards support supplemental staffing. The Avery Director convenes the Joint Faculty Committee on Avery Library whose members advise on matters related to library policies and services.

Avery Library collections and budget:

Avery Library's world-renowned collections are exceptional in both numbers and depth. Our collections comprise more than 585,000 volumes on architecture, art, and related fields of study including Avery's extensive collection of more than 40,000 rare books. The library also owns an estimated 1.5 million architectural drawings, prints, photographs, and other original architecture-related items. Avery Library maintains a large current and retrospective periodicals collection; this collection is essential to production and publication the *Avery Index to Architectural Periodicals*, the most comprehensive periodicals index in the field.

Under the authority of the Director, the Senior Bibliographer and the Architecture Bibliographer are together responsible for general book and periodical acquisitions; the Curator of Rare Books for rare book acquisitions; the Curator of Drawings & Archives for original material acquisitions; and the Curator of Art Properties for artworks offered to Columbia University. Current collection size calculations:

Format	Collection	Items	TOTALS per FORMAT
Monograph	Architecture	313,208	
	Fine arts	209,100	
			522,308 monographs
Serials	Architecture	1,364	
	Fine arts	993	
			2,357 serials
Electronic books	Architecture	30,000	
	Fine arts	35,000	
			65,000 e-books
Drawings		840,000	840,000 drawings
Photographs		250,000	250,000 photographs
Archival materials		5,100 linear feet	5,100 linear feet archival materials

Avery's collection budget is approximately $1,135,000 with $463,145 of that total dedicated to the architectural research collections (current monographs and serials in print and electronic formats). Additionally, approximately $220,000 is allocated for rare and special collection acquisitions. The balance of collection budget is allocated to acquisitions in fine arts that also support the design interests of the School. We also selectively acquire special collections materials through major donations to our Avery Classics (rare books) collection and to our Drawings & Archives collections. In the last fiscal year these in-kind contributions were valued at more than $3 million in material assets. Significant acquisitions for this year will add incalculable value to the collections.

While the overall strength of our collections budget is good, this year's 5% annual increase does not yet fully restore the more than 8% increases typical before the economic downturn. This coupled with significant fluctuations in global currency exchange rates keeps us ever-watchful of our financial resources and can greatly effect growth of our research collections in future. Similarly, the increase in electronic format monographic and serial publications – although less robust than in other disciplines – is beginning to have an effect on our balance of print-to-electronic holdings. This year we calculated holdings of nearly 30,000 architecture-related e-books, compared to none at the time of the last NAAB review. Intellectual property limitations and non-standard publication platforms will continue to constrain widespread publication in digital form, but we anticipate that an increasing percentage of our collections budget will be allocated to electronic format materials as they become available in our disciplines, which will in turn present new challenges to traditional print-based collection building.

Avery Library services:

Avery Library is primarily a non-circulating collection with approximately 45% of the collection stored in Columbia's offsite storage facility (ReCAP) with delivery to campus Monday-Friday. Every effort is made to provide access to collections for students, faculty, and scholars; our access services include: course reserves, inter-library loan, and resource sharing cooperatives (e.g. Borrow Direct, SHARES, and MaRLI) each of which provide access to circulating materials from partner research libraries. We assign individual carrels to PhD students and in-library shelves to masters-level students. Faculty services include circulation of up to 25 volumes to their offices; and newly launched electronic document delivery service which provides direct-to-desktop delivery of digital copies of research literature.

Research support services include: orientation sessions for incoming students, online and in-person reference service, individual research consultations by appointment, in-class library

research instruction, and new this year 'personal librarians' assigned to each PhD student at their option. Recent studies have shown that individualized research support at the beginning and throughout the graduate research process contributes to on-time and successful completion of degree requirements, at the same time alerts students to the wealth of resources available through Avery and our partner institutions worldwide.

Avery librarians seek every opportunity to collaborate with GSAPP faculty on curricular integration of our collections/services. Faculty in the historic preservation, urban planning, and history and theory programs regularly schedule class sessions in special collections, collaborating with our curators to engage students with primary resource materials. Student assignments are often focused on the use of rare books, architectural drawings and archives presented in these sessions. Direct exposure to the masterworks of architectural history -- *our Piranesi drawings, unrivaled collection of Serlio manuscripts, the archives of Frank Lloyd Wright, Philip Johnson, Greene & Greene, McKim Mead and White, Hugh Ferris, the Guastavino Fireproof Company among many others; to every great work in the canon of architectural printed books from the Renaissance to the present; and to our outstanding collection of 19th-20th century American architectural ephemera (trade catalogs, view books, real estate prospectuses)* – students and scholars have direct and unfettered access to our unparalleled collection of unique materials.

Avery Library special projects:

Avery continues to provide leadership in architectural libraries worldwide evidenced in its robust collection development program, its publications and its special projects. We lead and/or participate in initiatives that focus on issues with specific impact on architectural research.

Going digital -- 21st century architectural design is largely created using a variety of digital tools, notably a plethora of CAD programming environments. This dynamic and rapidly changing digital product landscape presents a huge challenge to publishers, archivists and librarians. How CAD documentation joins the body of literature supporting future study of the architectural record, and how libraries and archives collect these formats, are serious current and future challenges:

- *CAD*-generated content – we are accepting CAD-generated content for three archival collections: Columbia's Manhattanville Project, the High Line Archive, and the Durst Organization Archives. These projects each provide unique samples that will help us develop a standards-based replicable model for ingesting and preserving CAD assets going forward
- *Web*-archiving – we are selectively harvesting, cataloging, preserving and providing current and retrospective access to unique and potentially fugitive web site content. We've selected the arena of historic preservation organizations as the subject focus of this effort. This beta project will help us calculate effort and costs for infrastructure, legal and selector engagement in this practice.
- *Digitization* -- collections of primary source content in digital formats are being created by local digitization efforts and from proprietary sources as well. These resources are expensive to produce and/or to license and are placing significant pressures on library selectors to stretch or divert collection funds. Complex intellectual property frameworks and technical infrastructures for production, distribution and use of these media-rich resources present challenges to budgets and expert services as much as to users trying to access and use them. Avery is actively involved in large-scale and local digitization projects involving our special collections and GSAPP's visual resource collection:
    - New York Real Estate Brochure collection (NYRE) http://nyre.cul.columbia.edu
    - Biggert Collection of Architectural Vignettes http://biggert.cul.columbia.ed

- Avery's Architectural Novelties https://ldpd.lamp.columbia.edu/omeka/exhibits/show/novelties
- GSAPP | Avery | ARTstor -- 20th century architecture digitization project which will not only service GSAPP's digital image needs, but also provide a canonic corpus of works curated by leading scholars for the benefit of architectural faculty and students worldwide.
- Old York Library Digital Project – creation of a digital library based on NYC content collected by Seymour Durst over the course of his professional career as one of NYC's leading real estate developers; supported by $1.2 million grant from the Durst Organization.

Data development

Underlying the success of any digital environment are structured data constructs, complex data exchange protocols, and shared technical infrastructures that enable aggregation, discovery and dissemination of research content. Avery is leading several efforts to promote inter-institutional data and resource aggregation; promote geospatial data integration to enhance resource discovery; and to encourage collaborative efforts to shape the landscape of digitally accessible content for the 21st century. Significant projects include:

- The Built Works Registry (BWR) http://builtworksregistry.wordpress.com/
  $1 million three-year Institute of Museum & Library Services (IMLS) grant to create a registry of built work records, unique IDs, and geo-locations for 100,000 built works worldwide; to create an open online system for future additions and dissemination of work records; and to promote BWR as a standard data resource for allied projects worldwide.
- The Future of Art Bibliography Initiative
  http://www.getty.edu/research/scholars/research_projects/fab/index.html including the Getty Research Portal http://www.getty.edu/research/tools/portal/index.html which provides access to digitized copies of canonic works in architectural history. Avery contributed nearly 2,000 digitized volumes to the project.
- *Avery Index to Architectural Periodicals* has for 75 years been produced by and under the editorial control of the Avery Library; it continues to be the leading disciplinary index for architectural literature worldwide.. As of August 2009 and following 23 years of Getty infrastructure support, all technical infrastructure and business operations were taken on by the Avery Library staff and Columbia University Libraries' technical services group. No interruption of service, loss of data or change in editorial operations occurred. Recent adjustments to the editorial and business model are realizing significant increases in subscription revenues and reductions in operational costs. Our strategic goals focus on expansion of global content and linkage to full-text content to indexed journals. Data from the *Index* is contributed to ULAN, AAT and BWR.

Slide and Video Library

Located in 204 Fayerweather Hall, the Slide and Video Library makes freely accessible more than 250,000 slides and over 600 recorded lectures and events in VHS and DVD format to the School's faculty, students and alumni. The slide collection includes architectural photographs, drawings and designs and related subjects. Users may borrow and scan slides for use in academic presentations; access resources from the growing digital library collection; and borrow VHS and DVD recordings of lectures and conferences organized by the school. (DVD Catalogue**:** http://www.arch.columbia.edu/resources/slide-and-video-library/catalogue). Recent initiatives

have resulted in a rapidly growing digital slide collection. The Library is also home to a unique collection of Lantern Slides, which may be viewed on-site during daily operating hours. The Slide and Video Library is a student-run facility that is staffed by graduate GSAPP students and administered by a faculty Slide and Video Library Committee.

Building Science and Technology Archives

The School has a program to obtain and maintain key construction documents (as built documents whenever possible) for major American Buildings of the 20th century. The School acquires structural, enclosure, and mechanical drawings for several buildings a year, and currently has an archive of digital drawings for more than 60 buildings. These drawings are used each year by students in A4114 Architectural Technology IV and A4634 Advanced Curtain wall. They are available for internal use (not including publication) by faculty and students. The archive is housed in the first floor of Schermerhorn Hall Extension, and is administered by the Director of Building Science and Technologies, Phillip Anzalone.

Student Work Archives

The School archives representative student work from every studio in the M. Arch. program every semester, as well as representative work from the Building Technologies and Visual Studies courses. Models are photographed with standard backdrop and lighting. Drawings, diagrams, renderings, and animations are stored digitally. Hand drawing are professionally scanned and also stored digitally. Digital files are managed through multiple, redundant hard drives as well as DVDs. Backup copies of the files are stored in a fireproof safe. All archives are located in the M.Arch. Program office, and are available to the faculty for use within the School and for publication purposes. A selection of the archived work is published in *Abstract*, the annual book that chronicles the work of the GSAPP and published online on the School website as a publicly accessible archive of successive years of design work. Drawings by a few outstanding students are selected each year to be held permanently in the drawings collection of Avery Library. The archives are maintained by the editor of *Abstract*.

Geographic Information Systems Program at GSAPP: GIS @ GSAPP

Geographic Information Systems (GIS) has become an essential tool for understanding the urban environment. GIS software has therefore become an invaluable resource for both Architects and Planners in conceptualizing the built environment. Columbia's Graduate School of Architecture, Planning and Preservation (GSAPP) has recognized the ability of this technology, and has focused on developing infrastructure and research that explores new possibilities in GIS applications. GSAPP's GIS infrastructure includes courses targeted toward teaching GIS to Urban Planners, Urban Designers and Architects, and a collection of GIS data that includes information as far reaching as Nairobi, Kenya and as local as Manhattan's Upper West Side. GSAPP has also created online resources for those interested in GIS. The GIS web site (www.arch.columbia.edu/gis) provides GIS tutorials, tips and tricks for using the GIS software, a summary of data available on the GIS server, and information about current GIS research projects being conducted at the school. Additionally, The Spatial Information Design Lab (SIDL) is a GSAPP research lab where the GIS focused research is housed.

The GIS server provides all GSAPP students with direct access to the GIS data that has been collected by GSAPP from their desktop computers in Avery Hall. The GSAPP maintains a collection of spatial data focused on (but not limited to) New York City and its surrounding region. Given the geographic diversity of GSAPP studios the GIS collection also includes data from

places as far reaching as Kenya, Israel, and Berlin. The collection process began during the 2000-2001 school year. The data was reorganized, inventoried, and updated in the summer of 2006 and the data continues to be updated according to those plans. We have purchased additional server space to house the expanding collection.

The GIS data server has become an important part of GSAPP's infrastructure, as students from all studios - architecture, urban design, and planning - benefit from the unique data sources stored and maintained on the server. The data stored on the server provides students with the base maps necessary for the initial studies of many of their studio locals. These layers include demographics, land use, building footprints, water, roads, highways, and other infrastructure. The GIS data server has therefore become the backbone for initial studio research. The GIS data server not only holds GSAPP's GIS data collection, but it also holds a series of fourteen exercises that teach students common GIS skills. Various GIS exercises have been developed yearly as special skills are needed for various coursework and new developments with GIS data technology. The exercises are effective in fielding technical questions from students and faculty. Here is a link to the current tutorials http://www.arch.columbia.edu/resources/gis/how. Rather than showing students how to perform a particular GIS function, they now can be referred to a series of tutorials developed based on their common help questions. This allows students to learn GIS without waiting for an appointment with a GIS Specialist.

GIS is used for research in a variety of Columbia departments. GIS can be found in departments as diverse as Engineering and History. Given the far-reaching use of GIS at Columbia, the GSAPP initiated a University wide committee to investigate the need for GIS infrastructure on campus. This committee was formed during the 2003-2004 school year and its members include representatives from the Columbia Libraries, Institute for Social and Economic Research and Policy (ISERP), Earth Institute, Columbia University Information Technology (CUIT), Barnard College, and GSAPP. With funding from the University provost, committee members established a summer research fellowship program in 2005. The committee was also able to use the funding to organize their respective data collections and work towards the implementation of a common data catalog. This catalog inspired the creation of the Columbia Library Geospatial data catalog, which supplements the GIS data catalog available to GSAPP students. Although the committee no longer exists, there is still at GIS@Columbia working group, which is used to make decisions about software versions and large shared data purchases.

Progress Made

GIS@GSAPP has continued to grow over the years, not only have we continued to expand our data collection a whole new set of curriculum has been developed that help to integrate geographic theory and computation strategies into the pedagogy of the school. In the last six years we have added several new courses to the GSAPP curriculum including Advanced GIS, GIS for Architecture, GIS for Historic Preservation, modules for GIS in Real Estate Development and Urban Design. The popularity of using GIS has made it necessary to include two new "Introduction to GIS" course sessions. We also developed additional weekend workshops for those students who do not have the time in their course schedule to take a full semester course but want to know some GIS basics to help them with their design process.

GIS@GSAPP has also expanded the software available to students interested in Geographic Analysis, with the purchases of two remote sensing packages (IDRISI and Feature Analyst), Acquiring a donation of Google Earth Pro for all GSAPP computers, and Rhino Terrain that allows users to take 3D GIS files and translate them into Rhino and other more traditional Architectural 3D rendering packages.

Interest in using GIS in architecture studios and research has also increased steadily and we have hired a new GIS Data Visualization Specialist to help meet the demand of students, faculty and researchers who want to include GIS strategies in their work.

I.3. Institutional Characteristics

I.3.1. Statistical Reports

Program Student Characteristics
Demographics (race/ethnicity and gender)

As Reported in the 2011 ARS

Ethnicity	Full Time Male Total	Full Time Female Total	Full Time Total	Part Time Male Total	Part Time Female Total	Part Time Total	Male Total	Female Total	Grand Total
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	16	19	35	0	0	0	0	0	35
Native Hawaiian or other Pacific Islander	0	2	2	0	0	0	0	0	2
Black or African American	1	1	2	0	0	0	0	0	2
Hispanic/Latino	10	6	16	0	0	0	0	0	16
White	56	62	118	0	0	0	0	0	118
Two or more races	9	11	20	0	0	0	0	0	20
Nonresident alien	21	18	39	0	0	0	0	0	39
Race and ethnicity unknown	14	13	27	0	0	0	0	0	27
TOTAL	**127**	**132**	**259**	**0**	**0**	**0**	**127**	**132**	**259**

As reported for the academic year in which the last visit took place									
Ethnicity	**Full Time Male Total**	**Full Time Female Total**	**Full Time Total**	**Part Time Male Total**	**Part Time Female Total**	**Part Time Total**	**Male Total**	**Female Total**	**Grand Total**
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	64	0	0	0	0		64
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	2	0	0	0	0	0	2
Hispanic/Latino	0	0	14	0	0	0	0	0	14
White	0	0	119	0	0	0	0	0	119
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	36	0	0	0	0	0	36
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	**0**	**0**	**235**	**0**	**0**	**0**	**132**	**103**	**235**

Qualifications of students admitted in the fiscal year prior to visit

Graduate Record Examiniation	
Verbal (200-800)	**450 minimum**
Quantitative (200-800)	
Analytical (0.0-6.0)	

Time to Graduation

As reported in the 2011 ARS	
III. Time to Graduation	
Normal Time to Completion: (number of quarters or semesters in which students are expected to complete all requirements for the NAAB-accredited degree	**6 semesters**
Percentage of students who completed in normal time	**96%**
Percentage of students who completed in 150% of normal time.	**2%**

Program Faculty Characteristics
Demographics (race/ethnicity and gender)

Below please find as requested full-time faculty data for 2011 (the most recent annual report) and for 2007 (year of the previous visit). Because of recent hires our full-time architecture faculty profile has changed significantly. We are therefore also including data for the current year (2012-2013).

I. Full-time Instructional Faculty Compared to the Time of the Last Visit (full academic year)

As reported in the 2011 ARS

Ethnicity	Professor - Male	Professor - Female	Professor - TOTAL	Assoc. Professor - Male	Assoc. Professor - Female	Assoc. Professor - TOTAL	Assis. Professor - Male	Assis. Professor - Female	Assis. Professor - TOTAL	Instructor - Male	Instructor - Female	Instructor - TOTAL	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0	0		0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	1	1	0	1	1	0	0	3	2
Hispanic/Latino	0	0	0	0	0	0	0	1	1	0	0	0	1
White	5	3	8	1	0	1	0	2	2	0	0	0	11
Two or more races	0	0	0	0	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	3	8	1	1	2	0	4	5	0	0	0	14

As reported for the academic year in which the last visit took place (2007)

Ethnicity	Professor - Male	Professor - Female	Professor - TOTAL	Assoc. Professor - Male	Assoc. Professor - Female	Assoc. Professor - TOTAL	Assis. Professor - Male	Assis. Professor - Female	Assis. Professor - TOTAL	Instructor - Male	Instructor - Female	Instructor - TOTAL	GRAND TOTAL
American Indian or Alaska Native	0	*0*	0	0	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0	0		0	0
Black or African American	0	0	0	0	0	0	0	1	1	0	0	0	1
Hispanic/Latino	0	0	0	0	0	0	0	1	1	0	0	0	1
White	4	3	7	2	0	2	0	3	3	0	0	0	12
Two or more races	0	0	0	0	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0	0	0	0	0

Reporting for the Current Academic Year (2012-2013)													
Ethnicity	**Professor - Male**	**Professor - Female**	***Professor - TOTAL***	**Assoc. Professor - Male**	**Assoc. Professor - Female**	**Assoc. Professor - TOTAL**	**Assis. Professor - Male**	**Assis. Professor - Female**	**Assis. Professor - TOTAL**	**Instructor - Male**	**Instructor - Female**	**Instructor - TOTAL**	**GRAND TOTAL**
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	1	1	1	0	1	0	0	0	2
Hispanic/Latino	1	0	0	1	0	1	0	1	1	0	0	0	3
White	6	3	9	0	3	3	1	3	4	0	0	0	16
Two or more races	0	0	0	0	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	7	3	10	1	4	5	2	4	6	0	0	0	21

Number of Faculty promoted each year since last visit

II. Faculty Promotions	**2006-2007**	**2007-2008**	**2008-2009**	**2009-2010**	**2010-2011**	**2011-2012**
Faculty in the accredited program						
Assistant to Associate Professor						
Associate to Full Professor				1		1
Faculty in the institution						
Assistant to Associate Professor					1	
Associate to Full Professor						

Number of Faculty receiving tenure each year since last visit

III. Faculty Receiving Tenure	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012
Faculty in the accredited program	0	0	0	0	0	2
Faculty in the institution	1	0	0	1	0	1

In the spring of 2012 two women were granted tenure: Mabel Wilson and Felicity Scott. Their tenure began on July 1, 2012.

Faculty Licenses

While the School does not maintain a record of professional licensures amongst its faculty, we have collected such information for the purposes of accreditation. Below is a matrix of faculty who own licences.

Matrix of License

First	Last	Title	License / Registration
Markus	Dochantschi	Adjunct Assistant Professor of Architecture	ARB, United Kingdom/ AKH, Germany
Paula	Tomisaki	Adjunct Assistant Professor	Argentina
Christoph	Kumpusch	Adjunct Assistant Professor of Architecture	Austria
Zachary	Kostura	Adjunct Assistant Professor of Architecture	CA
Michael	Jacobs	Adjunct Assistant Professor	CA/NY
Lydia	Kallipoliti	Adjunct Assistant Professor of Architecture	EU
Juergen	Mayer	Adjunct Assistant Professor	Germany
Karla	Rothstein	Adjunct Associate Professor of Architecture	Germany
Ezio	Blasetti	Adjunct Assistant Professor	Greece
Ada	Tolla	Adjunct Assistant Professor	Italy
Giuseppe	Lignano	Adjunct Assistant Professor	Italy
Babak	Bryan	Adjunct Assistant Professor	NY
Bernard	Tschumi	Professor	NY
Chris	Andreacola	Adjunct Assistant Professor of Architecture	NY
Christy	Cheng	Adjunct Assistant Professor	NY
Chuck	Eldred	Adjunct Assistant Professor	NY
Craig	Konyk	Adjunct Assistant Professor of Architecture	NY
Daniel	Vos	Adjunct Assistant Professor of Architecture	NY
Davidson	Norris	Adjunct Associate Professor	NY
Douglas	Gauthier	Adjunct Associate Professor of Architecture and Real Estate Development	NY
Enrique	Walker	Adjunct Associate Professor of Architecture and Director, AAD Program	NY

Eric	Bunge	Adjunct Assistant Professor of Architecture	NY
Jeffrey	Johnson	Adjunct Assistant Professor	NY
Joshua	Uhl	Adjunct Assistant Professor	NY
Junko	Nakagawa	Adjunct Assistant Professor of Architecture	NY
Karel	Klein	Adjunct Assistant Professor of Architecture	NY
Keith	Kaseman	Adjunct Associate Professor	NY
Laila	Seewang	Adjunct Assistant Professor of Architecture	NY
Laurie	Hawkinson	Professor; Director, Advanced Studios	NY
Lise Anne	Couture	Associate Professor	NY
Marc	Kushner	Adjunct Assistant Professor of Architecture and Real Estate Development	NY
Mark	Bearak	Adjunct Assistant Professor	NY
Michael	Young	Adjunct Assistant Professor	NY
Mimi	Hoang	Adjunct Assistant Professor of Architecture	NY
Philip	Parker	Adjunct Assistant Professor	NY
Phillip	Anzalone	Director, ABS Lab; Adjunct Assistant Professor of Architecture	NY
Phu	Hoang	Adjunct Assistant Professor of Architecture	NY
Reinhold	Martin	Associate Professor; Director, Ph.D. in Architecture; Director, Temple Hoyne Buell Center for the Study of American Architecture	NY
Robert	Condon	Adjunct Assistant Professor of Architecture	NY
Robert	Heintges	Adjunct Professor	NY
Scott	Hughes	Adjunct Assistant Professor of Architecture	NY
Sho	Shigematsu	Adjunct Associate Professor	NY
Thomas	Leeser	Adjunct Assistant Professor of Architecture	NY
Zach	Downey	Adjunct Assistant Professor of Architecture	NY
Hilary	Sample	Associate Professor	NY / Connecticut
Lynne	Breslin	Adjunct Associate Professor	NY / NJ
Galia	Solomonoff	Assistant Professor	NY/Argentina
Kevin	Lichten	Adjunct Assistant Professor	NY/CO
Paul	Segal	Adjunct Professor	NY/CO/MA/NJ/PE/ WA/VE
Kunio	Kudo	Adjunct Associate Professor	NY/Japan
Robert	Otani	Adjunct Assistant Professor of Architecture	NY/New Brunswick/Nova Scotia/Alberta
Scott	Marble	Adjunct Assistant Professor	NY/NJ
Arthur Jay	Hibbs	Adjunct Associate Professor	NY/NJ/CO
Leslie	Gill	Adjunct Professor	NY/NJ/CO/RI
Kate	Orff	Assistant Professor	NY/NJ/CO/SC/RLA
Robert	Marino	Adjunct Associate Professor	NY/NJ/IL
Steven	Holl	Professor	NY/NJ/MA/MO/TX/ VA/DC/WA
Mario	Gooden	Adjunct Associate Professor	NY/SC

Michael	Bell	Professor of Architecture; Director, Core Studies	RA
Andrew	Zientek	Adjunct Associate Professor of Architecture	RLA
Nicholas	Quennell	Adjunct Associate Professor	RLA
Cristina	Goberna	Adjunct Assistant Professor of Architecture	Spain
Juan	Herreros	Associate Professor	Spain
Urtzi	Grau	Adjunct Assistant Professor of Architecture	Spain
Frederic	Levrat	Adjunct Assistant Professor of Architecture	Switzerland and EU
Kutan	Ayata	Adjunct Assistant Professor of Architecture	Turkey

I.3.2. Annual Reports

Annual Report – 2007

2008 NAAB STATISTICAL REPORT

SCHOOL: Columbia University Completed by: David Hinkle, Associate Dean

ACSA REGION: EC (NE) SE SW WC W (circle one)

PUBLIC or PRIVATE (circle one)

STUDENT DATA

For Accredited Programs Only

	4 Year **PreProf	B.Arch Five-year	B.Arch **PostPreProf	B.Arch *PostNonProf	M.Arch Five-year	M.Arch **PostPreProf	M.Arch ***PostNonProf
Full-Time Students							235
Part-Time Students							0
FTE Students							235
Arch Design Studio Students							235
Students Working Part-Time							n.a.
Outside Stud. Serv. by Dept.							0
African-American Students							2
Native American Students*							0
Asian/Pacific Isle Students							69
Hispanic Origin Students							14
Women Students							103
Foreign Students							36
Total Degrees Awarded							95
Grads. Fin. Estab. No. Yrs.							95
Degrees Awarded Women							30
Degrees Awarded Afri-Amer							0
Degrees Awarded Amer. Ind.							0
Degrees Awarded Asi/Pac. Isl.							17
Degrees Awarded Hispanics							5
Min Req. SAT/ACT/GRE Score							n.a.
Number of Applicants							n.a.
Number Accepted							n.a.
Enrollment Target/Goal							n.a.
Student Studio/Faculty Ratio							1:1

*Include Eskimos and Aleuts
**Includes four-year program component of 4+1 yrs. B.Arch degree and 4+2 yrs. M. Arch degree.
***Non-Professional: baccalaureate degree that is not part of an accredited professional program.

FACILITY/RESOURCE DATA

Departmental Library LCNA or 720-729 Collection	0
Total Architecture Collection in Departmental Library	0
University Library LCNA or 720-729 Collection	251,169
Total Architecture Collection in University Library	439,281
Departmental Library Architecture Slides	280,000
University Library Architecture Slides	0
Departmental Library Architecture Videos	700
Staff in Dept. Library	2.5
Number of Computer Stations	450
Amount Spent on Information Technology	n.a.
Annual Budget for Library Resources	n.a.
Per-Capita Financial Support Received from University	n.a.
Private Outside Monies Received by Source	n.a.
Studio Area (Net Sq. ft.)	11,793
Total Area (Gross Sq. ft.)	44,537

Final

2008 NAAB STATISTICAL REPORT

SCHOOL: Columbia University Completed by: David Hinkle, Associate Dean

FULL-TIME FACULTY SALARIES	Number	Minimum	Average	Maximum	Univ. Avg.
Professor	3		[redacted]		
Associate Professor	2				
Assistant Professor	5				
Instructor	0				

FACULTY DATA	Department Total
Full-Time Faculty	14
Part-Time Faculty	99
Full-time Equivalent (FTE) Faculty	64
Tenured Faculty	9
Tenure-Track Positions	6
FTE Administrative Positions	16
Faculty Engaged in Service to Comm.	30
Faculty Engaged in Service to Univ.	16
FT Faculty who are U.S. Licensed Registered Architects	8
PT Faculty who are U.S. Licensed Registered Architects	30
Practicing Architects	38
FTE Graduate TAs	29
FT Faculty Avg. Contact Hrs/Wk	12
PT Faculty Avg. Contact Hrs/Wk	6

NO. FULL-TIME FACULTY CREDENTIALS

Ph.D.	5
D. Arch	0
M.A. or S.	0
Prof. M. Arch	8
B. Arch	1
Post Prof. Masters	0
Other	0

	FT	PT	Tenured	Prof.	Assoc.	Assist.
African-American Faculty	1	2	0	0	0	1
Native American Faculty*	0	0	0	0	0	0
Asian/Pacific Island Faculty	0	15	0	0	0	0
Hispanic Origin Faculty	1	4	0	0	0	1
Women Faculty	9	24	3	3	1	5

*Include Eskimos and Aleuts

Annual Report – 2008

NAAB

Annual Report Submission
View Questionnaire (Edit)

Your last Review Time was 11/29/2008 11:30:53 AM.
You have reviewed 10 times

Columbia University

Annual Report Submission for the year 2008 .

This Annual Report Submission has been submitted already.
Submission Time: 11/29/2008 11:30:53 AM

PART I - ANNUAL STATISTICAL REPORT

SECTION A. INSTITUTIONAL CHARACTERISTICS

This section captures aggregated information about the home institution for each architecture program. Wherever possible, this information should be the same as that reported by the institution to IPEDS in its most recent Institutional Characteristics, Completion and 12-month Enrollment report.

1. Program Contact Information

(for inclusion on the NAAB website)

Institution Name:	Columbia University
Academic Unit Name:	Graduate School of Architecture
Address 1:	Planning and Preservation
Address 2:	400 Avery Hall/1172 Amsterdam Ave.
City:	New York
State:	NY
Zip:	10027
Architecture Program School Fax No:	212.864.0410
Architecture Program School URL:	www.arch.columbia.edu
ACSA Region:	Northeast

In order to modify your organization information please visit the ACSA Guide site.

2. Institution Type

Private Not for profit

3. Carnegie Classification

Doctoral/Research Universities - Extensive

4. Which regional accreditation agency accredits your institution?

Middle States Association of Colleges and Schools (MSACS)

Questions 5, 6, and 7 regarding Contact Information

5. Who has direct administrative responsibility for the architecture program?

Name	Mark Wigley
Title	Dean
Office Tel. No	212-854-3473
Fax No	212-854-7778
Email Address	maw152@columbia.e

6. To whom should inquiries regarding this questionnaire to be addressed?

Name	David Hinkle
Title	Associate Dean
Office Tel. No	212-854-3473
Fax No	212-854-7778
Email Address	dwh2@columbia.edu

7. Who is the administrator responsible for verifying data (and completing IPEDS reports) at your institution?

Name	Lucy Drotning
Title	Associate Provost
Office Tel. No	212-854-3036
Fax No	0
Email Address	ld221@columbia.edu

8. Institutional Student Characteristics

(Aggregated for the Institution; this information should be the same as that reported to IPEDS for the last fiscal year)

Total undergraduate enrollment:	7411
Total graduate enrollment:	15574

25th percentile ACT score for undergraduates enrolling on the last fiscal year	0
75th percentile ACT score for undergraduates enrolling on the last fiscal year	0
25th percentile SAT score for undergraduates enrolling on the last fiscal year	0
75th percentile SAT score for undergraduates enrolling on the last fiscal year	0
Average GRE score for graduates enrolling in the last fiscal year (not including specialized programs like law, medicine, business or other programs for which a specialized entrance examination is required):	0

9. Total enrollment of all undergraduate students by race/ethnicity

	Male	Female
Total	3754	3657
American Indian/Alaska Native	0	0
Asian or Pacific Islander	0	0
Black, Non-Hispanic	0	0
Hispanic	0	0
White, Non-Hispanic	0	0
Other	0	0
Declined to or Did Not Supply	3754	3657

10. Total enrollment of all graduate students by race/ethnicity

	Male	Female
Total	7620	7954
American Indian/Alaska Native	0	0
Asian or Pacific Islander	0	0
Black, Non-Hispanic	0	0

Hispanic	0	0
White, Non-Hispanic	0	0
Other	0	0
Declined to or Did Not Supply	7620	7954

SECTION B. NAAB-ACCREDITED ARCHITECTURE PROGRAMS

This section captures information about the specific NAAB-accredited degree programs offered by the institution, unless otherwise noted in the instructions.

1. Which NAAB accredited degree programs were offered during the last fiscal year?

B. Arch.

M. Arch. X

D. Arch.

2. Which non-accredited architecture programs were offered during the last fiscal year?

No Non-NAAB Accredited Programs detected in the ACSA Guide. Please visit the ACSA Guide site to programs to your University.

3. Does your institution have plans to initiate any new NAAB-accredited degree programs?

No

If yes, a report is required in PART II – Narrative Report that outlines the plans and planning for the new program.

4. Does your institution have plans to discontinue any of its NAAB-accredited degree programs?

No

If yes, a report is required in PART II – Narrative Report that outlines the plans and planning for the new program.

5. What academic year calendar type does your institution have?

2 Semesters or Trimester

6. Give total number of days of instruction for the academic year for each NAAB accredited degree program(s), not including non-instructional activities such as orientations, reading periods or exams and holidays.

The program(s) in this section are dependent on your selection in Section B, Question 1.

M. Arch.: 0

7. Credit Hours for Completion:

The program(s) in this section are dependent on your selection in Section B, Question 1.

a. Indicate the total number of credit hours taken at your institution to earn each NAAB accredited degree offered by your institution.

M. Arch. Pre-Professional: 108

M. Arch. Non Pre-Professional: 0

b. By degree, how many of those credit hours are assigned to general education?

M. Arch. Pre-Professional: 0

M. Arch. Non Pre-Professional: 0

c. By degree, what is the average number of credits each full time student completes per academic term?

M. Arch. Pre-Professional: 18

M. Arch. Non Pre-Professional: 0

8. Is your program offered at more than one campus or location? If yes, please list:

No

SECTION C. TUITION, FEES AND FINANCIAL SUPPORT FOR STUDENTS IN NAAB-ACCREDITED PROGRAMS

1. Tuition is defined as "the amount of money charged to students for instructional services. Tuition may be charged per credit, per term, or per academic year." What were the tuition and fees for the NAAB-accredited degree program(s) for the last fiscal year:

B Arch.

If this section is not applicable, please enter all zero's (0).

	Annual Tuition	Annual Fees	Per Hour/Term/Year
Full-Time			
In-State	0	0	Per Academic Year
Out-of-State	0	0	Per Academic Year
Part-Time			
In-State	0	0	Per Academic Year
Out-of-State	0	0	Per Academic Year

M Arch.

If this section is not applicable, please enter all zero's (0).

	Annual Tuition	Annual Fees	Per Hour/Term/Year
Full-Time			
In-State	34200	2491	Per Academic Year
Out-of-State	34200	2491	Per Academic Year
Part-Time			
In-State	0	0	Per Academic Year

Out-of-State	0	0	Per Academic Year

a. Does the institution offer discounted or differential tuition for a NAAB-accredited degree program?
If yes, please explain

No

b. Is a summer session required for any portion of your accredited degree program(s)?

No

If yes, what is the additional tuition and fees for the summer program?
(If no fill this section with 0s)

	Summer Tuition	Summer Fees	Per Hour/Term/Year
Full-Time			
In-State	0	0	Per Academic Year
Out-of-State	0	0	Per Academic Year
Part-Time			
In-State	0	0	Per Academic Year
Out-of-State	0	0	Per Academic Year

Does the institution offer discounted or differential tuition for summer courses for a NAAB-accredited degree program?
If yes, please explain

No

2. Per Student Expenditure:

What is the average per student expenditure for students enrolled in NAAB accredited degree programs? This is the total amount of goods and services, per student, used to produce the educational services provided by the NAAB-accredited program

The program(s) in this section are dependent on your selection in Section B, Question 1.

M. Arch. Student Exp 0

3. Financial Aid:

What was the total amount of financial aid (Grants, loans, assistantships, scholarships, fellowships, tuition waivers, tuition discounts, veteran's benefits, employer aid [tuition reimbursement] and other monies [other than from relatives/friends] provided to students to meet expenses. This includes Title IV subsidized and unsubsidized loans provided directly to student) provided by the institution to students enrolled in each program(s) leading to a NAAB accredited degree during the last fiscal year?

The program(s) in this section are dependent on your selection in Section B, Question 1.

Financial Aid provided to graduate students in NAAB-accredited programs:

Total Graduate Financial Aid for last fiscal year	0
Average Graduate Financial Aid per student	0

4. Graduate Assistants:

What was the total number of graduate-level students employed on a part-time basis for the primary purpose of assisting in classroom or laboratory instruction or in the conduct of research during the last fiscal year within the NAAB-accredited programs offered by your institution? Please include: graduate assistant, teaching assistant, teaching associate, teaching fellow or research assistant in your calculation.

30

SECTION D. STUDENT CHARACTERITICS FOR NAAB-ACCREDITED DEGREE PROGRAMS

(If your institution offers more than one program, please provide the information for each program separately)

1. Applicants

Indicate the number of individuals who fulfilled the institution's requirements to be considered for admission (including payment or waiving of the application fee, if any) and who had been notified of one of the following actions during the last fiscal year: admission, nonadmission, placement on a waiting list, or application withdrawn by applicant or institution. Information about ethnicity must be based on self-identification information provided by the applicant.

Please fill out these tables completely, entering 0 for blanks. Please use whole, positive integers and do not include '$' or ',' A person can only be counted in one group.

B. Arch.

	Male	Female
Total		
American Indian/Alaska Native		
Asian or Pacific Islander		
Black, Non-Hispanic		
Hispanic		
White, Non-Hispanic		
Other		
Declined to or Did Not Supply		

M. Arch.

	Male	Female
Total	401	396
American Indian/Alaska Native	0	0

Asian or Pacific Islander	0	0
Black, Non-Hispanic	0	0
Hispanic	0	0
White, Non-Hispanic	0	0
Other	0	0
Declined to or Did Not Supply	401	396

2. Admitted:

Indicate the total number of individuals who were notified of admission or placement on a waiting list for the last fiscal year. Information about ethnicity must be based on self-identification information provided by the admitted applicants.

Please fill out these tables completely, entering 0 for blanks. Please use whole, positive integers and do not include '$' or ',' A person can only be counted in one group.

B. Arch.

	Male	Female
Total		
American Indian/Alaska Native		
Asian or Pacific Islander		
Black, Non-Hispanic		
Hispanic		
White, Non-Hispanic		
Other		
Declined to or Did Not Supply		

M. Arch.

	Male	Female
Total	112	101
American Indian/Alaska Native	0	0
Asian or Pacific Islander	0	0
Black, Non-Hispanic	0	0
Hispanic	0	0
White, Non-Hispanic	0	0

Other	0	0
Declined to or Did Not Supply	112	101

3. Enrolled

Please fill out these tables completely, entering 0 for blanks. Please use whole, positive integers and do not include '$' or ',' A person can only be counted in one group.

Indicate the number of individuals who enrolled during the last fiscal year. Exclude readmitted students who were counted as enrolled in a prior year). Information about ethnicity must be based on self-identification information provided by the individual.

B. Arch.

	Full-Time		Part-Time	
	Male	Female	Male	Female
Total				
American Indian/Alaska Native				
Asian or Pacific Islander				
Black, Non-Hispanic				
Hispanic				
White, Non-Hispanic				
Other				
Declined to or Did Not Supply				

M. Arch.

	Full-Time		Part-Time	
	Male	Female	Male	Female
Total	40	49	0	0
American Indian/Alaska Native	0	0	0	0
Asian or Pacific Islander	0	0	0	0
Black, Non-Hispanic	0	0	0	0
Hispanic	0	0	0	0
White, Non-Hispanic	0	0	0	0
Other	0	0	0	0
Declined to or Did Not Supply	40	49	0	0

4. Total undergraduate/graduate enrollment in NAAB-Accredited program by race/ethnicity

Please fill out these tables completely, entering 0 for blanks. Please use whole, positive integers and do not include '$' or ',' A person can only be counted in one group.

B. Arch.

	Full-Time		Part-Time	
	Male	Female	Male	Female
Total				
American Indian/Alaska Native				
Asian or Pacific Islander				
Black, Non-Hispanic				
Hispanic				
White, Non-Hispanic				
Other				
Declined to or Did Not Supply				

M. Arch.

	Full-Time		Part-Time	
	Male	Female	Male	Female
Total	117	118	0	0
American Indian/Alaska Native	0	0	0	0
Asian or Pacific Islander	0	0	0	0
Black, Non-Hispanic	0	0	0	0
Hispanic	0	0	0	0
White, Non-Hispanic	0	0	0	0
Other	0	0	0	0
Declined to or Did Not Supply	117	118	0	0

5. Number of total credits in professional architectural studies

a. Total number of credits in professional architectural studies taken by full time students for the last fiscal year:

8460

b. Total number of credits in professional architectural studies taken by part-time students in the last fiscal year:

0

SECTION E. DEGREES AWARDED

(The information requested in this section should be provided by the unit within the institution responsible for submitting the annual Completion Report to the National Center for Education Statistics and IPEDS.)

1. What is the total number of NAAB-accredited degrees that were awarded in the last fiscal year?

	B. Arch.		M. Arch.		D. Arch.	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**
Total	0	0	35	37	0	0
American Indian/Alaska Native	0	0	0	0	0	0
Asian or Pacific Islander	0	0	0	0	0	0
Black, Non-Hispanic	0	0	0	0	0	0
Hispanic	0	0	0	0	0	0
White, Non-Hispanic	0	0	0	0	0	0
Other	0	0	0	0	0	0
Declined to or Did Not Supply	0	0	35	37	0	0

SECTION F. RESOURCES FOR STUDENTS AND LEARNING IN NAAB-ACCREDITED PROGRAMS

1. Total number of catalogued titles in the architecture library collection

(all forms of media)

Catalogued Titles on Main campus: 461245

Catalogued Titles on Other locations: 0

2. Total number of catalogues titles that have Library of Congress NA or Dewey 720-729

(all forms of media)

Library of Congress NA or Dewey 720-729 Catalogued Titles on Main campus: 263727

Library of Congress NA or Dewey 720-729 Catalogued Titles on Other locations: 0

3. What is the total number of permanent workstations that can be assigned to students enrolled in design studios?

Permanent Workstations on Main Campus: 475

Permanent Workstations at Other locations	0

4. Briefly describe the labs, shops, and other learning resources available to all students enrolled in NAAB-accredited degree program(s):

Resource Type	Available?
Shop	Yes ◉ No ○
Computer Facilities (Lab)	Yes ◉ No ○
Computer Output Facilities (Plotters, Specialized plotting)	Yes ◉ No ○
Digital Fabrication Facilities	Yes ◉ No ○
Wireless Network	Yes ◉ No ○
Image Collection (Slide Library)	Yes ◉ No ○
Photo Studio/Darkroom	Yes ◉ No ○
Lecture Series	Yes ◉ No ○
Gallery/Exhibits	Yes ◉ No ○
Other	Yes ◉ No ○

If Other Resources, Please describe:
Materials Conservation Lab
Applied Research Lab

SECTION G. HUMAN RESOURCE SUMMARY (Architecture Program)

Faculty are defined as follows: Persons identified by the institution as such and typically those whose initial assignments are made for the purpose of conducting instruction, research or public service as a principal activity (or activities). They may hold academic rank titles of professor, associate professor, assistant professor, instructor, lecturer or the equivalent of any of those academic ranks. Faculty may also include the chancellor/president, provost, vice provosts, deans, directors or the equivalent, as well as associate deans, assistant deans and executive officers of academic departments (chairpersons, heads or the equivalent) if their principal activity is instruction combined with research and/or public service. The designation as "faculty" is separate from the activities to which they may be

currently assigned. For example, a newly appointed president of an institution may also be appointed as a faculty member. Graduate, instruction, and research assistants are not included in this category.

1. Full-time Instructional Faculty

Those members of the instructional/research staff who are employed full time and whose major assignment is instruction, including those with release time for research. Includes full-time faculty for whom it is not possible to differentiate between reaching, research, and public service because each of these functions is an integral component of his/her regular assignment.

Please fill out these tables completely, entering 0 for blanks. Please use whole, positive integers and do not include '$' or ',' A person can only be counted in one group.

Professor

	Tenured		Tenure-Track		Non-Tenure-Track	
	Male	Female	Male	Female	Male	Female
Total	5	3	0	0	0	0
American Indian/Alaska Native	0	0	0	0	0	0
Asian or Pacific Islander	0	0	0	0	0	0
Black, Non-Hispanic	0	0	0	0	0	0
Hispanic	0	0	0	0	0	0
White, Non-Hispanic	5	3	0	0	0	0
Other	0	0	0	0	0	0
Declined to or Did Not Supply	0	0	0	0	0	0

Associate Professor

	Tenured		Tenure-Track		Non-Tenure-Track	
	Male	Female	Male	Female	Male	Female
Total	2	0	0	1	0	0
American Indian/Alaska Native	0	0	0	0	0	0
Asian or Pacific Islander	0	0	0	0	0	0
Black, Non-Hispanic	0	0	0	1	0	0
Hispanic	0	0	0	0	0	0
White, Non-Hispanic	2	0	0	0	0	0
Other	0	0	0	0	0	0

Declined to or Did Not Supply	0	0	0	0	0	0

Assistant Professor

	Tenured		Tenure-Track		Non-Tenure-Track	
	Male	Female	Male	Female	Male	Female
Total	0	0	0	4	0	0
American Indian/Alaska Native	0	0	0	0	0	0
Asian or Pacific Islander	0	0	0	0	0	0
Black, Non-Hispanic	0	0	0	1	0	0
Hispanic	0	0	0	1	0	0
White, Non-Hispanic	0	0	0	2	0	0
Other	0	0	0	0	0	0
Declined to or Did Not Supply	0	0	0	0	0	0

Instructor

	Tenured		Tenure-Track		Non-Tenure-Track	
	Male	Female	Male	Female	Male	Female
Total	0	0	0	0	0	0
American Indian/Alaska Native	0	0	0	0	0	0
Asian or Pacific Islander	0	0	0	0	0	0
Black, Non-Hispanic	0	0	0	0	0	0
Hispanic	0	0	0	0	0	0
White, Non-Hispanic	0	0	0	0	0	0
Other	0	0	0	0	0	0
Declined to or Did Not Supply	0	0	0	0	0	0

Total credit hours taught by full time faculty: 234

2. Part-Time Instructional Faculty

Please fill out these tables completely, entering 0 for blanks. Please use whole, positive integers and do not include '$' or ',' A person can only be counted in one group.

Professor

	Tenured		Tenure-Track		Non-Tenure-Track	
	Male	Female	Male	Female	Male	Female
Total	0	0	0	0	0	0
American Indian/Alaska Native	0	0	0	0	0	0
Asian or Pacific Islander	0	0	0	0	0	0
Black, Non-Hispanic	0	0	0	0	0	0
Hispanic	0	0	0	0	0	0
White, Non-Hispanic	0	0	0	0	0	0
Other	0	0	0	0	0	0
Declined to or Did Not Supply	0	0	0	0	0	0

Associate Professor

	Tenured		Tenure-Track		Non-Tenure-Track	
	Male	Female	Male	Female	Male	Female
Total	0	0	0	0	0	0
American Indian/Alaska Native	0	0	0	0	0	0
Asian or Pacific Islander	0	0	0	0	0	0
Black, Non-Hispanic	0	0	0	0	0	0
Hispanic	0	0	0	0	0	0
White, Non-Hispanic	0	0	0	0	0	0
Other	0	0	0	0	0	0
Declined to or Did Not Supply	0	0	0	0	0	0

Assistant Professor

	Tenured		Tenure-Track		Non-Tenure-Track	
	Male	Female	Male	Female	Male	Female
Total	0	0	0	0	0	0

American Indian/Alaska Native	0	0	0	0	0	0	0	0
Asian or Pacific Islander	0	0	0	0	0	0	0	0
Black, Non-Hispanic	0	0	0	0	0	0	0	0
Hispanic	0	0	0	0	0	0	0	0
White, Non-Hispanic	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0
Declined to or Did Not Supply	0	0	0	0	0	0	0	0

Instructor

	Tenured		Tenure-Track		Non-Tenure-Track	
	Male	Female	Male	Female	Male	Female
Total	0	0	0	0	0	0
American Indian/Alaska Native	0	0	0	0	0	0
Asian or Pacific Islander	0	0	0	0	0	0
Black, Non-Hispanic	0	0	0	0	0	0
Hispanic	0	0	0	0	0	0
White, Non-Hispanic	0	0	0	0	0	0
Other	0	0	0	0	0	0
Declined to or Did Not Supply	0	0	0	0	0	0

Total credit hours taught by part-time faculty: 0

3. Adjunct Faculty

Non-tenure track faculty service in a temporary or auxiliary capacity to teach specific courses on a course-by-course basis. Includes both faculty who are hired to teach an academic degree-credit course and those hired to teach a remedial, developmental or ESL course; whether the later three categories earn college credit is immaterial. Excludes regular part-time faculty, graduate assistants, full-time professional staff who may teach individual courses (such as the dean or academic advisor) and appointees who teach non-credit courses exclusively).

Please fill out these tables completely, entering 0 for blanks. Please use whole, positive integers and do not include '$' or ',' A person can only be counted in one group.

	Professor		Assoc. Prof.		Assist. Prof.		Instructor	
	Male	Female	Male	Female	Male	Female	Male	Female
Total	5	0	12	6	64	12	0	0
American Indian/Alaska Native	0	0	0	0	0	0	0	0
Asian or Pacific Islander	0	0	1	2	7	4	0	0
Black, Non-Hispanic	0	0	1	0	0	0	0	0
Hispanic	0	0	2	0	4	0	0	0
White, Non-Hispanic	5	0	8	4	53	8	0	0
Other	0	0	0	0	0	0	0	0
Declined to or Did Not Supply	0	0	0	0	0	0	0	0

4. Faculty Credentials: Indicate the highest degree achieved by each faculty member (full-time, part-time, and adjunct):

Please fill out these tables completely, entering 0 for blanks. Please use whole, positive integers and do not include '$' or ',' A person can only be counted in one group.

	Full Time		Part Time		Adjunct	
	Male	Female	Male	Female	Male	Female
D. Arch.	0	0	0	0	0	0
M. Arch.	2	3	0	0	49	10
B. Arch.	1	0	0	0	4	1
Ph.D. in architecture	3	4	0	0	8	2
Ph.D. in other discipline	0	0	0	0	0	0
Post-professional master's in architecture	0	0	0	0	0	0
Other degrees	0	1	0	0	19	5
Registered in U.S. Jurisdiction	3	4	0	0	40	10

5. Average annual salaries for full-time instructional faculty teaching in the NAAB-accredited program for the last fiscal year

Please fill out these tables completely, entering 0 for blanks. Please use whole, positive integers and do not include '$' or ',' A person can only be counted in one group.

	Number	Minimum	Avg.	Max.	Univ. Avg.
Professor	8	[redacted]			0
Assoc. Prof.	3				0
Assist. Prof.	4				0
Instructor	0	2	4	6	0

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SECTION A. INSTITUTIONAL CHARACTERISTICS

1. Program Contact Information:

Name	Columbia University
Title	Graduate School of Architecture, Planning and Preservation
Office Phone Number	212.854.3414
Fax Number	212.864.0410
Email	

2. Institution Type:
Private Not for profit

3. Carnegie Classification:

a. Basic Classification:	RU/VH: Research Universities (very high research activity)
b. Undergraduate Instructional Program:	A&S-F/HGC: Arts & sciences focus, high graduate coexistence
c. Graduate Instructional Program:	CompDoc/MedVet: Comprehensive doctoral with medical/veterinary
d. Size and Setting:	L4/HR: Large four-year, highly residential

4. Which regional accreditation agency accredits your institution?
Middle States Association of Colleges and Schools (MSACS)

5. In which ACSA region is the institution located?
Northeast

6. Who has direct administrative responsibility for the architecture program?

Name	Mark Wigley
Title	Dean
Office Phone Number	212-854-3473
Fax Number	212-854-7778
Email	maw152@columbia.edu

7. To whom should inquiries regarding this questionnaire to be addressed?

Name	David Hinkle
Title	Associate Dean
Office Phone Number	212-854-3473
Fax Number	212-854-7778
Email	dwh2@columbia.edu

8. Who is the university administrator responsible for verifying data (and completing IPEDS reports) at your institution?

Name	Lucy Drotning
Title	Associate Provost
Office Phone Number	212-854-3036
Fax Number	0
Email	ld221@columbia.edu

9. Institutional Test Scores

a. SAT

Critical Reading
25th percentile SAT score: 0
75th percentile SAT score: 0
Mathematics
25th percentile SAT score: 0

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75th percentile SAT score: 0
Writing
25th percentile SAT score: 0
75th percentile SAT score: 0

b. ACT
25th percentile ACT score: 0
75th percentile ACT score: 0

c. Graduate Record Examination (GRE)
Verbal: 525 (200-800)
Quantitative: 600 (200-800)
Analytical: 5 (0.0 – 6.0)

SECTION B – NAAB-ACCREDITED ARCHITECTURE PROGRAMS

1. DEGREE PROGRAMS

a. Which NAAB accredited / candidate degree programs were offered during the last fiscal year? (B. Arch, M. Arch, D. Arch)

Accredited
M. Architecture
Candidate
N/A

b. Did your institution offer any pre-professional architecture degree programs during the last fiscal year? No

Degree Type	Available?	Full Degree Title

c. Did your institution offer any post-professional architecture degree programs during the last fiscal year?

Full Degree Title
Master of Science in Advanced Architural Design
Master of Science in Architecture and Urban Design
Ph.D. in Architecture (History and Theory)

2. Does your institution have plans to initiate any new NAAB-accredited degree programs?
No

3. Does your institution have plans to discontinue any of its NAAB-accredited degree programs?
No

4. What academic year calendar type does your institution have?
2 Semesters or Trimester

5. Credit Hours for Completion for each program:

a. Indicate the total number of credit hours taken at your institution to earn each NAAB accredited/candidate degree program offered by your institution:
   a. M. Architecture undergraduate (five years, no baccalaureate degree awarded prior): 0
   b. M. Architecture Pre-Professional (degree designed for candidates who have a pre-professional degree in architecture): 108
   c. M. Architecture Non-Pre-Professional (degree designed for candidates who have an undergraduate degree in a descipline other than architecture): 0
   d.

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b. By degree, what is the distribution of credit hours in the following: General Education, Professional, and Electives?
   a. M. Architecture undergraduate:
   b. General Education: 0
   c. Professional: 0
   d. Electives: 0
   e. M. Architecture Pre-Professional:
   f. General Education: 0
   g. Professional: 0
   h. Electives: 0
   i. M. Architecture Non-Pre-Professional:
   j. General Education: 0
   k. Professional: 102
   l. Electives: 6
   m.

6. Average credit hours per student per term by degree program?
M. Architecture undergraduate: 0

M. Architecture Pre-Professional: 0

M. Architecture Non-Pre-Professional: 18

7. Is your degree program(s) offered in whole, or in part, at more than one campus or location?
[no response needed in ARS print out]

SECTION C –TUITION, FEES AND FINANCIAL SUPPORT FOR STUDENTS IN NAAB-ACCREDITED PROGRAMS

1. Tuition is defined as "the amount of tuition and required fees covering a full academic year most frequently charged to students for instructional services."
   a. What were the tuition and fees for the institution for the last fiscal year?

   b. Does the institution offer discounted or differential tuition for a NAAB-accredited degree program? No

   c. Is a summer session required for any portion of your accredited degree program(s)? If yes, what is the additional tuition and fees for the summer program? No

   d. Does the institution offer discounted or differential tuition for summer courses for a NAAB accredited degree program? No

2. Financial Aid: What was the percent of students financial aid at both the institutional and architecture program levels (grants, loans, assistantships, scholarships, fellowships, tuition waivers, tuition discounts, veteran's benefits, employer aid [tuition reimbursement] and other monies [other than from relatives/friends] provided to students to meet expenses? *This includes Title IV subsidized and unsubsidized loans provided directly to student) provided by the institution to students enrolled in each program(s) leading to a NAAB accredited degree during the last fiscal year.*

Grant Type	% Students Receiving Aid	Average Amount by Types of Aid
b. Architecture Program	0%	0

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Federal Grants		
b. Architecture Program State/Local Grants	0%	0
b. Architecture Program Institutional Grants	[redacted]	
a. Institution Federal Grants	0%	0
a. Institution State/Local Grants	0%	0
a. Institution Institutional Grants	0%	0
a. Institution Student Loans	0%	0
b. Architecture Program Student Loans	0%	0

3. Graduate Assistantships (What was the total number of graduate-level students employed on a part-time basis for the primary purpose of assisting in classroom or laboratory instruction or in the conduct of research during the last fiscal year (Jul 1 – Jun 30) within the NAAB-accredited programs offered by your institution? *Please include: graduate assistant, teaching assistant, teaching associate, teaching fellow or research assistant in your calculation.* **30**

SECTION D – STUDENT CHARACTERITICS FOR NAAB-ACCREDITED DEGREE PROGRAMS

1. APPLICANT CYCLE

a. Applicants:.

M. Architecture: 798

Race	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0
Asian	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	0	0	0
Hispanic/Latino	0	0	0
White	0	0	0
Two or more races	0	0	0
Nonresident alien	0	0	0
Race and ethnicity unknown	439	359	798
TOTAL	439	359	798

b. Admissions (students admitted):

M. Architecture: 218

Race	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0
Asian	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	0	0	0
Hispanic/Latino	0	0	0
White	0	0	0
Two or more races	0	0	0
Nonresident alien	0	0	0
Race and ethnicity unknown	120	98	218
TOTAL	120	98	218

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c. Entering Students:

M. Architecture: 89

Race	Male Full Time	Male Part Time	Female Full Time	Female Part Time	TOTAL Full Time	TOTAL Part Time	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0
Race and ethnicity unknown	49	0	40	0	89	0	89
TOTAL	49	0	40	0	89	0	89

2. Total undergraduate/graduate architecture enrollment in NAAB accredited program by race/ethnicity.

M. Architecture 247

Race	Male Full Time	Male Part Time	Female Full Time	Female Part Time	TOTAL Full Time	TOTAL Part Time	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0
Race and ethnicity unknown	133	0	114	0	247	0	247
TOTAL	133	0	114	0	247	0	247

SECTION E -- DEGREES AWARDED

1. What is the total number of NAAB-accredited degrees that were awarded in the last fiscal year?

M. Architecture:

Race	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0
Asian	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	0	0	0
Hispanic/Latino	0	0	0
White	0	0	0
Two or more races	0	0	0
Nonresident alien	0	0	0

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Race and ethnicity unknown	44	24	68
TOTAL	44	24	68

2. Time to Completion/Graduation
a. Time to completion equals the total number of semesters/quarters to complete the degree:
M. Architecture UG 0, M. Architecture Pre-Professional 0, M. Architecture Non-Pre-Professional 6

b. Percentage of students that graduate in "normal time to completion":
M. Architecture UG 0%, M. Architecture Pre-Professional 0%, M. Architecture Non-Pre-Professional 95%

3. Graduation rate for B. Arch programs:

SECTION F -- RESOURCES FOR NAAB-ACCREDITED PROGRAMS

1. Total number of catalogued titles in the architecture library collection within the institutional library system (Main Campus; Other locations – links from B8). 484307

2. Total number of catalogued titles that have Library of Congress NA or Dewey 720-729 (Main Campus; Other locations – links from B8). 276913

3. What is the total number of permanent workstations (studio desks) that can be assigned to students enrolled in design studios? 225

4. Please indicate which of the following: labs, shop, and other learning resources available to all students enrolled in NAAB-accredited degree program(s). No

5. Please indicate which of the following learning resources are available to all students enrolled in NAAB-accredited degree programs(s). [no response needed in ARS print out]

6. Financial Resources
a. Total Revenue from all sources $[redacted]

b. Expenditures
i. Instruction $[redacted]
ii. Capital $[redacted]
iii. Overhead $[redacted]

c. Per Student Expenditure: What is the average per student expenditure for students enrolled in a NAAB accredited degree program. *This is the total amount of goods and services, per student, used to produce the educational services provided by the NAAB-accredited program.*
Instruction + Overhead / FTE Enrollment: [redacted]

SECTION G - HUMAN RESOURCE SUMMARY (Architecture Program)

1. Credit Hours Taught (needs definition and perhaps example)
a. Total credit hours taught by full time faculty: 294
b. Total credit hours taught by part time faculty: 0
c. Total credit hours taught by adjunct faculty: 1101

2. Instructional Faculty
a. Full-time Instructional Faculty (Professor, Associate Professor, Assistant Professor, Instructor):
Full Time Professor

Race	Tenured	Tenured	Tenure-	Tenure-	Non-	Non-	TOTAL	TOTAL	GRAND

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	Male	Female	Track Male	Track Female	Tenure-Track Male	Tenure-Track Female	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	5	3	0	0	0	0	5	3	8
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	5	3	0	0	0	0	5	3	8

Full Time Associate Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	1	0	0	0	1	1
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	2	0	0	0	0	0	2	0	2
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	2	0	0	1	0	0	2	1	3

Full Time Assistant Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	1	0	0	0	1	1
Hispanic/Latino	0	0	0	1	0	0	0	1	1
White	0	0	0	2	0	0	0	2	2
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	4	0	0	0	4	4

Full Time Instructor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0

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Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	4	0	0	0	4	4
TOTAL	0	0	0	4	0	0	0	4	4

b. Part-Time Instructional Faculty (Professor, Associate Professor, Assistant Professor, Instructor).

Part Time Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

Part Time Associate Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

Part Time Assistant Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or	0	0	0	0	0	0	0	0	0

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Black or African American	0	0	0	1	0	0	0	1	1
Hispanic/Latino	0	0	0	1	0	0	0	1	1
White	0	0	0	2	0	0	0	2	2
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	4	0	0	0	4	4

Part Time Instructor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

c. Adjunct Faculty Professor, Associate Professor, Assistant Professor, Instructor):

Race	Professor Male	Professor Female	Associate Professor Male	Associate Professor Female	Assistant Professor Male	Assistant Professor Female	Instructor Male	Instructor Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0
Asian	0	0	1	3	8	7	0	0	9	10	19
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0	0	0
Black or African American	0	0	1	0	0	0	0	1	1	1	2
Hispanic/Latino	0	0	3	0	2	0	0	0	5	0	5
White	5	1	15	5	68	14	0	1	88	21	109
Two or more races	0	0	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	1	20	8	78	21	0	2	103	32	135

3. Faculty Credentials:

Highest Degree Achieved	Professor Male	Professor Female	Associate Professor Male	Associate Professor Female	Assistant Professor Male	Assistant Professor Female	TOTAL Male	TOTAL Female	GRAND TOTAL
D. Arch. (accredited)	0	0	0	0	0	0	0	0	0
M. Arch. (accredited)	2	3	0	0	0	0	2	3	5
B. Arch. (accredited)	1	0	0	0	0	0	1	0	1
Ph.D. in architecture	3	4	0	0	0	0	3	4	7
Ph.D. in other discipline	0	0	0	0	0	0	0	0	0
Post-professional graduate degree in architecture	0	0	0	0	0	0	0	0	0
Other degrees	0	1	0	0	0	0	0	1	1
Registered in U.S. Jurisdiction	3	4	0	0	0	0	3	4	7

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Registered in U.S. Jurisdiction	3	4	0	0	0	0	3	4	7

4. Salaries

Instructional Faculty Type	Number	Minimum	Average	Maximum	University Average
Professor	8	[redacted]			0
Assoc. Prof.	3				0
Assist. Prof.	4				0
Instructor	4	0	0	0	0

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SECTION A. INSTITUTIONAL CHARACTERISTICS

1. Program Contact Information:

Name	Columbia University
Title	Graduate School of Architecture, Planning and Preservation
Office Phone Number	212.854.3414
Fax Number	212.864.0410
Email	

2. Institution Type:
Private Not for profit

3. Carnegie Classification:

a. Basic Classification:	RU/VH: Research Universities (very high research activity)
b. Undergraduate Instructional Program:	A&S-F/HGC: Arts & sciences focus, high graduate coexistence
c. Graduate Instructional Program:	CompDoc/MedVet: Comprehensive doctoral with medical/veterinary
d. Size and Setting:	L4/HR: Large four-year, highly residential

4. Which regional accreditation agency accredits your institution?
Middle States Association of Colleges and Schools (MSACS)

5. In which ACSA region is the institution located?
Northeast

6. Who has direct administrative responsibility for the architecture program?

Name	Mark Wigley
Title	Dean
Office Phone Number	212-854-3473
Fax Number	212-854-7778
Email	maw152@columbia.edu

7. To whom should inquiries regarding this questionnaire to be addressed?

Name	David Hinkle
Title	Associate Dean
Office Phone Number	212-854-3473
Fax Number	212-854-7778
Email	dwh2@columbia.edu

8. Who is the university administrator responsible for verifying data (and completing IPEDS reports) at your institution?

Name	Lucy Drotning
Title	Associate Provost
Office Phone Number	212-854-3036
Fax Number	0
Email	ld221@columbia.edu

9. Institutional Test Scores

a. SAT

Critical Reading
25th percentile SAT score:
75th percentile SAT score:
Mathematics
25th percentile SAT score:

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75th percentile SAT score:
Writing
25th percentile SAT score:
75th percentile SAT score:

b. ACT
25th percentile ACT score:
75th percentile ACT score:

c. Graduate Record Examination (GRE)
Verbal: 525 (200-800)
Quantitative: 600 (200-800)
Analytical: 5 (0.0 – 6.0)

SECTION B – NAAB-ACCREDITED ARCHITECTURE PROGRAMS

1. DEGREE PROGRAMS

a. Which NAAB accredited / candidate degree programs were offered during the last fiscal year? (B. Arch, M. Arch, D. Arch)

Accredited
M. Architecture
Candidate
N/A

b. Did your institution offer any pre-professional architecture degree programs during the last fiscal year? No

Degree Type	Available?	Full Degree Title

c. Did your institution offer any post-professional architecture degree programs during the last fiscal year?

Full Degree Title
Master of Science in Advanced Architectural Design
Master of Science in Architecture and Urban Design

2. Does your institution have plans to initiate any new NAAB-accredited degree programs?
No

3. Does your institution have plans to discontinue any of its NAAB-accredited degree programs?
No

4. What academic year calendar type does your institution have?
2 Semesters or Trimester

5. Credit Hours for Completion for each program:

a. Indicate the total number of credit hours taken at your institution to earn each NAAB accredited/candidate degree program offered by your institution:
   a. M. Architecture undergraduate (five years, no baccalaureate degree awarded prior): 0
   b. M. Architecture Pre-Professional (degree designed for candidates who have a pre-professional degree in architecture): 0
   c. M. Architecture Non-Pre-Professional (degree designed for candidates who have an undergraduate degree in a descipline other than architecture): 108
   d.

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b. By degree, what is the distribution of credit hours in the following: General Education, Professional, and Electives?
   a. M. Architecture undergraduate:
   b. General Education: 0
   c. Professional: 0
   d. Electives: 0
   e. M. Architecture Pre-Professional:
   f. General Education: 0
   g. Professional: 0
   h. Electives: 0
   i. M. Architecture Non-Pre-Professional:
   j. General Education: 0
   k. Professional: 102
   l. Electives: 6
   m.

6. Average credit hours per student per term by degree program?
M. Architecture undergraduate: 0

M. Architecture Pre-Professional: 0

M. Architecture Non-Pre-Professional: 18

7. Is your degree program(s) offered in whole, or in part, at more than one campus or location?
[no response needed in ARS print out]

SECTION C –TUITION, FEES AND FINANCIAL SUPPORT FOR STUDENTS IN NAAB-ACCREDITED PROGRAMS

1. Tuition is defined as "the amount of tuition and required fees covering a full academic year most frequently charged to students for instructional services."
   a. What were the tuition and fees for the institution for the last fiscal year?

   b. Does the institution offer discounted or differential tuition for a NAAB-accredited degree program? No

   c. Is a summer session required for any portion of your accredited degree program(s)? If yes, what is the additional tuition and fees for the summer program? No

   d. Does the institution offer discounted or differential tuition for summer courses for a NAAB accredited degree program? No

2. Financial Aid: What was the percent of students financial aid at both the institutional and architecture program levels (grants, loans, assistantships, scholarships, fellowships, tuition waivers, tuition discounts, veteran's benefits, employer aid [tuition reimbursement] and other monies [other than from relatives/friends] provided to students to meet expenses? *This includes Title IV subsidized and unsubsidized loans provided directly to student) provided by the institution to students enrolled in each program(s) leading to a NAAB accredited degree during the last fiscal year.*

Grant Type	% Students Receiving Aid	Average Amount by Types of Aid
b. Architecture Program	[redacted]	

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Institutional Grants		
a. Institution Federal Grants	0%	0
a. Institution State/Local Grants	0%	0
a. Institution Institutional Grants	0%	0
a. Institution Student Loans	0%	0
b. Architecture Program Federal Grants	0%	0
b. Architecture Program State/Local Grants	0%	0
b. Architecture Program Student Loans	0%	0

3. Graduate Assistantships (What was the total number of graduate-level students employed on a part-time basis for the primary purpose of assisting in classroom or laboratory instruction or in the conduct of research during the last fiscal year (Jul 1 – Jun 30) within the NAAB-accredited programs offered by your institution? *Please include: graduate assistant, teaching assistant, teaching associate, teaching fellow or research assistant in your calculation.* **35**

SECTION D – STUDENT CHARACTERITICS FOR NAAB-ACCREDITED DEGREE PROGRAMS

1. APPLICANT CYCLE

a. Applicants:.

M. Architecture: 813

Race	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0
Asian	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	0	0	0
Hispanic/Latino	0	0	0
White	0	0	0
Two or more races	0	0	0
Nonresident alien	0	0	0
Race and ethnicity unknown	408	405	813
TOTAL	408	405	813

b. Admissions (students admitted):

M. Architecture: 214

Race	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0
Asian	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	0	0	0
Hispanic/Latino	0	0	0
White	0	0	0
Two or more races	0	0	0
Nonresident alien	0	0	0
Race and ethnicity unknown	105	109	214
TOTAL	105	109	214

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c. Entering Students:

M. Architecture: 91

Race	Male Full Time	Male Part Time	Female Full Time	Female Part Time	TOTAL Full Time	TOTAL Part Time	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0
Race and ethnicity unknown	44	0	47	0	91	0	91
TOTAL	44	0	47	0	91	0	91

2. Total undergraduate/graduate architecture enrollment in NAAB accredited program by race/ethnicity.

M. Architecture 262

Race	Male Full Time	Male Part Time	Female Full Time	Female Part Time	TOTAL Full Time	TOTAL Part Time	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0
Race and ethnicity unknown	127	0	135	0	262	0	262
TOTAL	127	0	135	0	262	0	262

SECTION E -- DEGREES AWARDED

1. What is the total number of NAAB-accredited degrees that were awarded in the last fiscal year?

M. Architecture:

Race	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0
Asian	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	0	0	0
Hispanic/Latino	0	0	0
White	0	0	0
Two or more races	0	0	0
Nonresident alien	0	0	0

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Race and ethnicity unknown	41	37	78
TOTAL	41	37	78

2. Time to Completion/Graduation
a. Time to completion equals the total number of semesters/quarters to complete the degree:

b. Percentage of students that graduate in "normal time to completion":

3. Graduation rate for B. Arch programs:

SECTION F -- RESOURCES FOR NAAB-ACCREDITED PROGRAMS

1. Total number of catalogued titles in the architecture library collection within the institutional library system (Main Campus; Other locations – links from B8). 50725

2. Total number of catalogued titles that have Library of Congress NA or Dewey 720-729 (Main Campus; Other locations – links from B8). 290760

3. What is the total number of permanent workstations (studio desks) that can be assigned to students enrolled in design studios? 269

4. Please indicate which of the following: labs, shop, and other learning resources available to all students enrolled in NAAB-accredited degree program(s). No

5. Please indicate which of the following learning resources are available to all students enrolled in NAAB-accredited degree programs(s). [no response needed in ARS print out]

6. Financial Resources
a. Total Revenue from all sources [redacted]

b. Expenditures
i. Instruction $[redacted]
ii. Capital $[redacted]
iii. Overhead $[redacted]

c. Per Student Expenditure: What is the average per student expenditure for students enrolled in a NAAB accredited degree program. *This is the total amount of goods and services, per student, used to produce the educational services provided by the NAAB-accredited program.*
Instruction + Overhead / FTE Enrollment: [redacted]

SECTION G - HUMAN RESOURCE SUMMARY (Architecture Program)

1. Credit Hours Taught (needs definition and perhaps example)
a. Total credit hours taught by full time faculty: 294
b. Total credit hours taught by part time faculty: 0
c. Total credit hours taught by adjunct faculty: 1100

2. Instructional Faculty
a. Full-time Instructional Faculty (Professor, Associate Professor, Assistant Professor, Instructor):
Full Time Professor

Race	Tenured Male	Tenured Female	Tenure-Track	Tenure-Track	Non-Tenure-	Non-Tenure-	TOTAL Male	TOTAL Female	GRAND TOTAL

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			Male	Female	Track Male	Track Female			
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	5	3	0	0	0	0	5	3	8
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	5	3	0	0	0	0	5	3	8

Full Time Associate Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	1	0	0	0	1	1
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	2	0	0	0	0	0	2	0	2
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	2	0	0	1	0	0	2	1	3

Full Time Assistant Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	1	0	0	0	1	1
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	2	0	0	0	0	0	2	0	2
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	2	0	0	1	0	0	2	1	3

Full Time Instructor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or	0	0	0	0	0	0	0	0	0

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other Pacific Islander									
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

b. Part-Time Instructional Faculty (Professor, Associate Professor, Assistant Professor, Instructor).

Part Time Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

Part Time Associate Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

Part Time Assistant Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0

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Black or African American	0	0	0	1	0	0	0	1	1
Hispanic/Latino	0	0	0	1	0	0	0	1	1
White	0	0	0	2	0	0	0	2	2
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	4	0	0	0	4	4

Part Time Instructor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

c. Adjunct Faculty Professor, Associate Professor, Assistant Professor, Instructor):

Race	Professor Male	Professor Female	Associate Professor Male	Associate Professor Female	Assistant Professor Male	Assistant Professor Female	Instructor Male	Instructor Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0
Asian	0	0	1	3	8	7	0	0	9	10	19
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0	0	0
Black or African American	0	0	1	0	0	0	0	1	1	1	2
Hispanic/Latino	0	0	3	0	2	0	0	0	5	0	5
White	5	1	15	5	68	14	0	1	88	21	109
Two or more races	0	0	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5	1	20	8	78	21	0	2	103	32	135

3. Faculty Credentials:

Highest Degree Achieved	Professor Male	Professor Female	Associate Professor Male	Associate Professor Female	Assistant Professor Male	Assistant Professor Female	TOTAL Male	TOTAL Female	GRAND TOTAL
D. Arch. (accredited)	0	0	0	0	0	0	0	0	0
M. Arch. (accredited)	2	3	0	0	0	0	2	3	5
B. Arch. (accredited)	1	0	0	0	0	0	1	0	1
Ph.D. in architecture	3	4	0	0	0	0	3	4	7
Ph.D. in other discipline	0	0	0	0	0	0	0	0	0
Post-professional graduate degree in architecture	0	0	0	0	0	0	0	0	0
Other degrees	0	1	0	0	0	0	0	1	1
Registered in U.S. Jurisdiction	3	4	0	0	0	0	3	4	7

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4. Salaries

Instructional Faculty Type	Number	Minimum	Average	Maximum	University Average
Professor	8	[redacted]			0
Assoc. Prof.	3				0
Assist. Prof.	3				0
Instructor	0	0	0	0	0

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SECTION A. INSTITUTIONAL CHARACTERISTICS

1. Program Contact Information:

Name	Columbia University
Title	Graduate School of Architecture, Planning and Preservation
Office Phone Number	212.854.3414
Fax Number	212.864.0410
Email	

2. Institution Type:
Private Not for profit

3. Carnegie Classification:

a. Basic Classification: research activity)	RU/VH: Research Universities (very high
b. Undergraduate Instructional Program: graduate coexistence	A&S-F/HGC: Arts & sciences focus, high
c. Graduate Instructional Program: with medical/veterinary	CompDoc/MedVet: Comprehensive doctoral
d. Size and Setting:	L4/HR: Large four-year, highly residential

4. Which regional accreditation agency accredits your institution?
Middle States Association of Colleges and Schools (MSACS)

5. In which ACSA region is the institution located?
Northeast

6. Who has direct administrative responsibility for the architecture program?

Name	Mark Wigley
Title	Dean
Office Phone Number	212-854-3473
Fax Number	212-854-7778
Email	maw152@columbia.edu

7. To whom should inquiries regarding this questionnaire to be addressed?

Name	David Hinkle
Title	Associate Dean
Office Phone Number	212-854-3473
Fax Number	212-854-7778
Email	dwh2@columbia.edu

8. Who is the university administrator responsible for verifying data (and completing IPEDS reports) at your institution?

Name	Lucy Drotning
Title	Associate Provost
Office Phone Number	212-854-3036
Fax Number	0
Email	ld221@columbia.edu

9. Institutional Test Scores

a. SAT

Critical Reading
25th percentile SAT score:
75th percentile SAT score:
Mathematics
25th percentile SAT score:

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75th percentile SAT score:
Writing
25th percentile SAT score:
75th percentile SAT score:

b. ACT
25th percentile ACT score:
75th percentile ACT score:

c. Graduate Record Examination (GRE)
Verbal: 525 (200-800)
Quantitative: 600 (200-800)
Analytical: 5 (0.0 – 6.0)

SECTION B – NAAB-ACCREDITED ARCHITECTURE PROGRAMS

1. DEGREE PROGRAMS

a. Which NAAB accredited / candidate degree programs were offered during the last fiscal year? (B. Arch, M. Arch, D. Arch)

Accredited
M. Architecture
Candidate
N/A

b. Did your institution offer any pre-professional architecture degree programs during the last fiscal year? No

Degree Type	Available?	Full Degree Title

c. Did your institution offer any post-professional architecture degree programs during the last fiscal year?

Full Degree Title
Master of Science in Advanced Architectural Design
Master of Science in Architecture and Urban Design

2. Does your institution have plans to initiate any new NAAB-accredited degree programs?
No

3. Does your institution have plans to discontinue any of its NAAB-accredited degree programs?
No

4. What academic year calendar type does your institution have?
2 Semesters or Trimester

5. Credit Hours for Completion for each program:

a. Indicate the total number of credit hours taken at your institution to earn each NAAB accredited/candidate degree program offered by your institution:
   a. M. Architecture undergraduate (five years, no baccalaureate degree awarded prior): 0
   b. M. Architecture Pre-Professional (degree designed for candidates who have a pre-professional degree in architecture): 0
   c. M. Architecture Non-Pre-Professional (degree designed for candidates who have an undergraduate degree in a descipline other than architecture): 208
   d.

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b. By degree, what is the distribution of credit hours in the following: General Education, Professional, and Electives?
   a. M. Architecture undergraduate:
   b. General Education: 0
   c. Professional: 0
   d. Electives: 0
   e. M. Architecture Pre-Professional:
   f. General Education: 0
   g. Professional: 0
   h. Electives: 0
   i. M. Architecture Non-Pre-Professional:
   j. General Education: 0
   k. Professional: 102
   l. Electives: 6
   m.

6. Average credit hours per student per term by degree program?
M. Architecture undergraduate: 0

M. Architecture Pre-Professional: 0

M. Architecture Non-Pre-Professional: 18

7. Is your degree program(s) offered in whole, or in part, at more than one campus or location?
[no response needed in ARS print out]

SECTION C –TUITION, FEES AND FINANCIAL SUPPORT FOR STUDENTS IN NAAB-ACCREDITED PROGRAMS

1. Tuition is defined as "the amount of tuition and required fees covering a full academic year most frequently charged to students for instructional services."
   a. What were the tuition and fees for the institution for the last fiscal year?

   b. Does the institution offer discounted or differential tuition for a NAAB-accredited degree program? No

   c. Is a summer session required for any portion of your accredited degree program(s)? If yes, what is the additional tuition and fees for the summer program? No

   d. Does the institution offer discounted or differential tuition for summer courses for a NAAB accredited degree program? No

2. Financial Aid: What was the percent of students financial aid at both the institutional and architecture program levels (grants, loans, assistantships, scholarships, fellowships, tuition waivers, tuition discounts, veteran's benefits, employer aid [tuition reimbursement] and other monies [other than from relatives/friends] provided to students to meet expenses? *This includes Title IV subsidized and unsubsidized loans provided directly to student) provided by the institution to students enrolled in each program(s) leading to a NAAB accredited degree during the last fiscal year.*

Grant Type	% Students Receiving Aid	Average Amount by Types of Aid
a. Institution Federal	0%	0

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Grants		
a. Institution State/Local Grants	0%	0
a. Institution Institutional Grants	0%	0
a. Institution Student Loans	0%	0
b. Architecture Program Federal Grants	0%	0
b. Architecture Program State/Local Grants	0%	0
b. Architecture Program Institutional Grants	[redacted]	
b. Architecture Program Student Loans	0%	0

3. Graduate Assistantships (What was the total number of graduate-level students employed on a part-time basis for the primary purpose of assisting in classroom or laboratory instruction or in the conduct of research during the last fiscal year (Jul 1 – Jun 30) within the NAAB-accredited programs offered by your institution? *Please include: graduate assistant, teaching assistant, teaching associate, teaching fellow or research assistant in your calculation.* **62**

SECTION D – STUDENT CHARACTERITICS FOR NAAB-ACCREDITED DEGREE PROGRAMS

1. APPLICANT CYCLE

a. Applicants:.

M. Architecture: 737

Race	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0
Asian	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	0	0	0
Hispanic/Latino	0	0	0
White	0	0	0
Two or more races	0	0	0
Nonresident alien	0	0	0
Race and ethnicity unknown	0	0	0
TOTAL	0	0	0

b. Admissions (students admitted):

M. Architecture: 216

Race	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0
Asian	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	0	0	0
Hispanic/Latino	0	0	0
White	0	0	0
Two or more races	0	0	0
Nonresident alien	0	0	0
Race and ethnicity unknown	0	0	0
TOTAL	0	0	0

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c. Entering Students:

M. Architecture: 88

Race	Male Full Time	Male Part Time	Female Full Time	Female Part Time	TOTAL Full Time	TOTAL Part Time	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	10	0	20	0	30	0	30
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0
Black or African American	1	0	0	0	1	0	1
Hispanic/Latino	4	0	3	0	7	0	7
White	16	0	17	0	33	0	33
Two or more races	5	0	7	0	12	0	12
Nonresident alien	0	0	0	0	0	0	0
Race and ethnicity unknown	1	0	4	0	5	0	5
TOTAL	37	0	51	0	88	0	88

2. Total undergraduate/graduate architecture enrollment in NAAB accredited program by race/ethnicity.

M. Architecture 259

Race	Male Full Time	Male Part Time	Female Full Time	Female Part Time	TOTAL Full Time	TOTAL Part Time	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0
Race and ethnicity unknown	127	0	132	0	259	0	259
TOTAL	127	0	132	0	259	0	259

SECTION E -- DEGREES AWARDED

1. What is the total number of NAAB-accredited degrees that were awarded in the last fiscal year?

M. Architecture:

Race	Male	Female	TOTAL
American Indian or Alaska Native	0	0	0
Asian	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0
Black or African American	0	0	0
Hispanic/Latino	0	0	0
White	0	0	0
Two or more races	0	0	0
Nonresident alien	0	0	0

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Race and ethnicity unknown	48	44	92
TOTAL	48	44	92

2. Time to Completion/Graduation
a. Time to completion equals the total number of semesters/quarters to complete the degree:

b. Percentage of students that graduate in "normal time to completion":

3. Graduation rate for B. Arch programs:

SECTION F -- RESOURCES FOR NAAB-ACCREDITED PROGRAMS

1. Total number of catalogued titles in the architecture library collection within the institutional library system (Main Campus; Other locations – links from B8). 53261

2. Total number of catalogued titles that have Library of Congress NA or Dewey 720-729 (Main Campus; Other locations – links from B8). 305298

3. What is the total number of permanent workstations (studio desks) that can be assigned to students enrolled in design studios? 269

4. Please indicate which of the following: labs, shop, and other learning resources available to all students enrolled in NAAB-accredited degree program(s). No

5. Please indicate which of the following learning resources are available to all students enrolled in NAAB-accredited degree programs(s). [no response needed in ARS print out]

6. Financial Resources
a. Total Revenue from all sources $[redacted]

b. Expenditures
i. Instruction $[redacted]
ii. Capital $[redacted]
iii. Overhead $[redacted]

c. Per Student Expenditure: What is the average per student expenditure for students enrolled in a NAAB accredited degree program. *This is the total amount of goods and services, per student, used to produce the educational services provided by the NAAB-accredited program.*
Instruction + Overhead / FTE Enrollment: [redacted]

SECTION G - HUMAN RESOURCE SUMMARY (Architecture Program)

1. Credit Hours Taught (needs definition and perhaps example)
a. Total credit hours taught by full time faculty: 238
b. Total credit hours taught by part time faculty: 0
c. Total credit hours taught by adjunct faculty: 1010

2. Instructional Faculty
a. Full-time Instructional Faculty (Professor, Associate Professor, Assistant Professor, Instructor):
Full Time Professor

Race	Tenured Male	Tenured Female	Tenure-Track	Tenure-Track	Non-Tenure-	Non-Tenure-	TOTAL Male	TOTAL Female	GRAND TOTAL

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			Male	Female	Track Male	Track Female			
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	5	3	0	0	0	0	5	3	8
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	5	3	0	0	0	0	5	3	8

Full Time Associate Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	1	0	0	0	1	1
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	1	0	0	0	0	0	1	0	1
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	1	0	0	1	0	0	1	1	2

Full Time Assistant Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	1	0	0	1	1
Hispanic/Latino	0	0	0	2	0	0	0	2	2
White	0	0	0	1	0	0	0	1	1
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	3	1	0	0	4	4

Full Time Instructor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or	0	0	0	0	0	0	0	0	0

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other Pacific Islander									
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

b. Part-Time Instructional Faculty (Professor, Associate Professor, Assistant Professor, Instructor).

Part Time Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

Part Time Associate Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

Part Time Assistant Professor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0

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Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

Part Time Instructor

Race	Tenured Male	Tenured Female	Tenure-Track Male	Tenure-Track Female	Non-Tenure-Track Male	Non-Tenure-Track Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0
Asian	0	0	0	0	0	0	0	0	0
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0
White	0	0	0	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0	0	0	0

c. Adjunct Faculty Professor, Associate Professor, Assistant Professor, Instructor):

Race	Professor Male	Professor Female	Associate Professor Male	Associate Professor Female	Assistant Professor Male	Assistant Professor Female	Instructor Male	Instructor Female	TOTAL Male	TOTAL Female	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0
Asian	0	0	2	3	7	8	0	0	9	11	20
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0	0	0
Black or African American	0	0	1	0	0	0	0	1	1	1	2
Hispanic/Latino	0	1	4	0	5	1	0	1	9	3	12
White	4	0	12	3	74	15	7	5	97	23	120
Two or more races	0	0	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4	1	19	6	86	24	7	7	116	38	154

3. Faculty Credentials:

Highest Degree Achieved	Professor Male	Professor Female	Associate Professor Male	Associate Professor Female	Assistant Professor Male	Assistant Professor Female	TOTAL Male	TOTAL Female	GRAND TOTAL
D. Arch. (accredited)	0	0	0	0	0	0	0	0	0
M. Arch. (accredited)	0	0	0	0	0	0	0	0	0
B. Arch. (accredited)	0	0	0	0	0	0	0	0	0
Ph.D. in architecture	1	2	1	1	0	1	2	4	6
Ph.D. in other discipline	0	0	0	0	0	0	0	0	0
Post-professional graduate degree in architecture	0	0	0	0	0	0	0	0	0
Other degrees	0	0	0	0	0	0	0	0	0
Registered in U.S. Jurisdiction	3	1	0	0	0	0	3	1	4

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4. Salaries

Instructional Faculty Type	Number	Minimum	Average	Maximum	University Average
Professor	8	[redacted]			0
Assoc. Prof.	2				0
Assist. Prof.	4				0
Instructor	0	0	0	0	0

Columbia University
IN THE CITY OF NEW YORK
THE GRADUATE SCHOOL OF ARCHITECTURE PLANNING AND PRESERVATION
400 AVERY HALL

STATEMENT REGARDING STATISTICAL DATA

September 7, 2012

We confirm that data submitted to NAAB through the Annual Report Submission system since the last site visit is accurate and consistent with other reports prepared and submitted by the School.

David Hinkle
Senior Associate Dean

I.3.3. Faculty Credentials

Andraos, Amale
Assistant Professor of Architecture
-B.Arch., McGill University, 1996; M.Arch., Harvard University, 1999.
-Principal, WORKac. Research focusing on the relationship between ecology and urbanism partly published in '49 Cities' book and shown in MoMA's Foreclosed Exhibition proposal.

Andreacola, Chris
Adjunct Assistant Professor of Architecture
-B.F.A., Rhode Island School of Design, 1980; B. Arch., Rhode Island School of Design, 1981.
-Senior Associate, Diller Scofidio + Renfro.

Anzalone , Phillip
Adjunct Assistant Professor of Architecture
-BPS.Architecture, State University of New York (Buffalo), 1994; M.Arch., Columbia, 1997.
-Principal, aa64. Director of the Laboratory for Applied Building Science. Leads research and curriculum related to applied and experimental building technology, digital design, fabrication and assembly techniques.

Attali, Erieta
Adjunct Assistant Professor of Architecture
-B.A. (Photography), Athens Technical Institution, 1992; M.A., Goldsmiths College, University of London, 1998.
-Fulbright Artist Award in Architectural Photography, 2000-2001; Japan Foundation Artist Fellowship, 2002-2003; Graham Foundation recipient, 2004.

Bearak, Mark
Adjunct Assistant Professor of Architecture
-B.S. of Arch., Georgia Tech, 2001; M. Arch., Columbia University, 2008.
-Architect, MESH Architectures, NY.

Bell, Michael
Professor of Architecture, Director of M.Arch Core Design Studios
-B.Sc., Catholic Univerisity of America, 1983
-M.Arch., University of California at Berkeley, 1987
-Principal, VisibleWeather. Received four Progressive Architecture Awards. Work exhibited at the Venice Biennale and MoMA's Foreclosed Exhibition.

Benjamin, David
Assistant Professor of Architecture
- B.A., Harvard University, 1996
- M.Arch., Columbia University, 2005
- Principal, The Living

Blasetti, Ezio
Adjunct Assistant Professor of Architecture
-Diploma, National Technical University of Athens, 2004; M.S.A.A.D., Columbia University, 2006.
-Founding Partner, Ahylo Studio, Athens. Work exhibited at Centre Pompidou, Paris. Awarded at the 2008 Annual Design Review I.D.

Bogosian, Biayna
Adjunct Assistant Professor of Architecture
-B.Arch., Woodbury University, 2008; M.S. A.A.D., Columbia University, GSAPP, 2011
-Project Architect, Mike Jacobs Architecture. Personal work exhibited internationally as part of the Machinic Processes installation, Architecture Biennial Beijing (October 2010).

Borders, Brigette
Adjunct Assistant Professor of Architecture

-B.A., Wellesley College, 2004; M.Arch., Columbia University, 2009.
-

Breslin, Lynne
Adjunct Associate Professor of Architecture
-A.B., Radcliffe, 1974; M.Arch., Princeton, 1978; M.A., 1982.
-Principal, Lynne Breslin Architects. 2004 AIA Award (*Dean House*)

Brush, Brian
Adjunct Assistant Professor of Architecture
-B.A., Montana State University, 2005 *(Summa Cum Laude);* M.Arch, Columbia University, 2010; M.S.U.D, Columbia University, 2010; PhD, Architecture, University of Oregon, 2012-present.
-Partner, E/B Office.

Bryan, Babak
Adjunct Assistant Professor of Architecture
-B.S., Engineering, California (Berkeley), 1998; M.Arch., Columbia, 2004.
-Partner, BanG studio. Lowenfish Award, 2004.

Buckley, Craig
Adjunct Assistant Professor of Architecture, Director of Print Publications
-B.A., Trent University, 1999; M.A. University of Western Ontario, 2001; Ph.D Candidate, Princeton University 2004-present.
- Director. The Office of Publications, GSAPP

Bunge, Eric
Adjunct Assistant Professor of Architecture
-B.Arch. with Distinction, McGill University, 1991; M.Arch. with Distinction, Harvard Graduate School of Design, 1996.
-Founding Principal, nARCHITECTS PLLC. Recipient of the 2005 Canadian Professional Rome Prize.

Carter, Nathaniel
Assistant Adjunct Professor
-B. of Environmental Design, Texas A&M University, 2005; M. Arch, Columbia University, 2008
-Lab for Applied Building Science Manager.

Cheng, Christy
Adjunct Assistant Professor of Architecture
-B.A., University of Pennsylvania, 2002; M.Arch, Harvard University, 2007
-Project Architect, Toshiko Mori Architect.

Cimini, Kevin
Adjunct Assistant Professor of Architecture
-B.Arch., University of California at Berkeley, 1997; M.Arch., Columbia University, 2004.
-Principal, MARCH. Focuses on the research, development and integration of applied digital technologies in the practice of architecture.

Collins, Mark
Adjunct Assistant Professor of Architecture
-B.S. Georgia Institute of Technology, 2001; M.Arch, Columbia University, 2006.
-Principal, Proxy Design Studio. Partner, Morpholio. Designer and programmer investigating the culture of innovation and technology in architecture

Condon, Robert
Adjunct Assistant Professor of Architecture
-B.Arch., Carnegie-Mellon University, 1984. Member, A.I.A. Registered architect.
-Owner, Robert S. Condon Architect.

Couture, Lise Anne
Adjunct Associate Professor of Architecture
B.Arch., Carleton, 1983; M.Arch., Yale, 1986. Mushenheim Fellow, University of Michigan. Fellowship, New

York Foundation for the Arts, 1992. Registered architect.

de Monchaux, Thomas
Adjunct Assistant Professor of Architecture
-B.A., Brown, 1996.

Dochantschi, Markus
Adjunct Assistant Professor of Architecture
-M.Arch., Darmstadt, Germany, 1995.
-Principal and Founder, studioMDA.

Downey, Zach
Adjunct Assistant Professor of Architecture
-B.Arch., Virginia Tech, 2005
-Partner, Parabox LLC- Data management for all processes directly related to the construction and facility management process

Draper, Joshua
Adjunct Assistant Professor of Architecture
-B.A., St. John's College, 1992; M.Arch., Columbia University, 2008
-Founder and Principal, PrePost. Exhibited at the Venice and Beijing Biennale and SFMoMA.

Eldred, Charles
Adjunct Assistant Professor of Architecture
-B.Arch., Cornell, 1986; M.Arch., California (Berkeley), 1987. Eidlitz Fellowship, Cornell, 1989.
-Principal, Charles Eldred Architect PLLC.

Fano, David
Adjunct Assistant Professor of Architecture
-B.A.in Architecture, Florida International University, 2003
- M.Arch., Columbia University, 2006

Frampton, Kenneth
Ware Professor of Architecture
-Dipl. Arch., Dipl. Trop., Architectural Association (London), 1956; A.R.I.B.A., 1957; Honorary Doctorate of Technology, Royal Institute of Technology, Stockholm, 1991; Honorary Doctorate in Environmental Studies, University of Waterloo, 1995; Honorary Doctorate in Environmental Studies, California College of the Arts and Crafts, 1999. Medaille d'Or, Academie d'Architecture Paris, 1987; ACSA Topaz medal for excellence in architectural education, 1990; associate of the A.I.A., 1993; fellow, American Academy of Arts and Sciences, 1993; member, Russian Academy of the Constructional Science, 1995.

Gallagher, Sean
Adjunct Assistant Professor of Architecture
-B.Art, University of North Carolina at Charlotte, 1999; B.Arch., University of North Carolina at Charlotte, 2000; M.S.AAD, Columbia University, 2005
-Senior Architect, Diller Scofidio + Renfro. McGraw Hill's & New York Construction Magazine 'Best of 2010' Award.

Gauthier, Douglas
Adjunct Associate Professor of Architecture and Real Estate Development.
-B.Arch./Art History, University of Notre Dame, 1985; M.S.A.A.D., Columbia University, 1992.
-Design Director, Gauthier Architects. Featured in Architectural Record's Design Vanguard; Architecture Magazine for a Visionary Architecture Citation and in Time Magazine: Forging the Future.

Gesualdi, Frank
Adjunct Assistant Professor of Architecture
-B.Arch., Syracuse University, 1999; M.S.A.A.D., Columbia University, 2004.
-Principal, EFGH, New York. Work focused on responsive design concepts and building techniques.

Gill, Alastair
Adjunct Assistant Professor of Architecture

-BA(Hons), Newcastle University, 1993; AADipl, Architectural Association, 1998; M.Res., London Consortium, 2001; PhD, London Consortium, under completion.
-Director, Impossible Productions Ink; ipi-Go.Research on the use of advanced Gaming Softwares to question ideas of public space and the generation of critique/production methods.

Gill, Leslie
Adjunct Associate Professor of Architecture
-B.Arch., Cooper Union, 1982.
-Registered Architect. Emerging Voices Award, Architectural League of New York, 1992. Vice chair, Van Alen Institute; trustee, The Cooper Union. Co-chair, Chrysler Design Awards.

Goberna, Cristina
Adjunct Assistant Professor of Architecture
-B.Arch., E.T.S.A.S Universidad de Sevilla, 2001; M.S.A.A.D, Columbia University, 2008; Graduate Certificate in Advanced Architectural Research. Columbia University, 2009; PhD Candidate, Escuela Técnica Superior de arquitectura de Barcelona (E.T.S.A.B)
-Director, Fake Industries Architectural Agonism. Curator and Manager, Van Alen Books, Van Alen Institute. Winner of EUROPAN 7 and 8 competitions.

Gooden, Mario
Visiting Assistant Professor of Architecture
-B.S., Clemson University, 1987; M.Arch., Columbia, 1990. McKim Prize, 1990; A.I.A. Medal, 1990; Alpha Rho Chi Medal, 1987.
-Principal, Huff + Gooden Architects. Specializes in educational, commercial, civic, institutional and residential architecture.

Grau, Urtzi
Adjunct Assistant Professor of Architecture
-Architect, ETSAB, 2000; MsAAD, GSAPP Columbia University, 2004; Graduate Certificate in Media and Modernity, Princeton University, 2006; M.A., Princeton University, 2007; Ph.D. Candidate History and Theory of Architecture, Princeton University.
-Director, Fake Industries Architectural Agonism. Young Architects Forum Prize 2009, the Architectural League of New York. EUROPAN 8 winner.

Green, Mark
Adjunct Assistant Professor of Architecture
-B.S. Arch., University of Utah, 2004; M.Arch., Columbia University, 2008
-Director,, CASE Design Inc, New York. Directs BIM and parametric design related projects for AEC firms.

Hasegawa, Toru
Adjunct Assistant Professor of Architecture
-B.S. Hosei University, 2003; M.Arch, Columbia University, 2006
-Principal, Proxy Design Studio. Partner, Morpholio. Designer and programmer investigating the culture of innovation and technology in architecture.

Hawkinson, Laurie
Professor of Architecture, Director of Advanced Studios
-B.A., California (Berkeley), 1974; M.A., 1975; B.Arch, Cooper Union, 1983.
-Partner, Smith-Miller + Hawkinson Architects LLP. Board of Directors, Architectural League of New York. 2007 AIA New York Chapter Architecture Award and Medal of Honor.

Heintges, Robert
Adjunct Associate Professor of Architecture
-B.A., Rice University, 1970; B.Arch., 1971.
-Founding Partner, Heintges & Associates. Building envelope and curtain wall consultant.

Herreros, Juan
Associate Professor of Architecture
-Architect, Escuela Técnica Superior de Arquitectura de Madrid, Spain. 1985; Ph.D, 1994.
-Principal, Herreros Arquitectos. 2008 RIBA Internacional Fellow, Royal Institute of British Architects.

Hibbs, Arthur Jay
Adjunct Associate Professor of Architecture
-B.Arch., Cooper Union, 1980
-Principal, Hibbs Architects, New York

Hoang, Mimi
Adjunct Assistant Professor of Architecture
-B.A. Massachusetts Institute of Technology, 1993; M.Arch., Harvard University, 1998.
-Founding Principal, nARCHITECTS PLLC.

Hoang, Phu
Adjunct Assistant Professor of Architecture
-B.S.Arch., Georgia Institute of Technology, 1996; M.Arch., Columbia University, 1999.
-Principal, MODU, New York/London. The New York Architectural League Young Architects Forum, 2009. Uses "current political conflicts and ecological disasters to formulate architectural questions."

Holl, Steven
Professor of Architecture
-B.Arch., University of Washington, 1970; Post-graduate studies, Architectural Association, London, 1976
-Principal, Steven Holl Architects. Multiple prestigious national/international awards. Selected Projects: Simmons Hall at MIT, 2003; Bloch Building, 2007; Linked Hybrid building complex, Beijing, 2009.

Hosagrahar, Jyoti
Adjunct Associate Professor of Architecture and Urban Planning
-B.Arch., School of Planning & Architecture, New Delhi, India, 1986; M.Planning, University of Southern California, Los Angeles, 1989; Ph.D., University of California, Berkeley, Department of Architecture, 1997.
- Architect, planner, and historian, engaged with planning, design, and policies on urban development, urban conservation and heritage management, and sustainability issues.

Hoxie, Christopher
Adjunct Assistant Professor of Architecture
-Visual Arts, Architecture / Sculpture, Bennington College, 1992; M.Arch., Harvard University, 2007
-Principal, MARCH. Focuses on the research, development and integration of applied digital technologies in the practice of architecture.

Huang, Jeffrey
- B.S. Mechanical and Aerospace Engineering, Cornell University, 1999; S.M. Building Technology, Massachusetts Institute of Technology, 2001
- Associate, Arup, New York

Hughes, Scott
Adjunct Assistant Professor of Architecture
- B.A. Architecture, University of California, Berkeley, 1993; M. Eng. Structural Engineering, University of Minnesota, Twin Cities, 1995
- Associate, Robert Silman Associates.

Inaba, Jeffrey
Adjunct Assistant Professor of Architecture
- B.A., California (Berkeley), 1985; Master in Design Studies, Harvard, 1989; M.Arch., Harvard University, 1990. Graham Foundation for Advanced Studies in the Fine Arts grant, 1998; Rockefeller Foundation/NYU Urban Forum Fellow, 1992.

Ivaliotis, Jason
Adjunct Assistant Professor of Architecture
- B.A. Architecture, Miami University, Ohio, 2003; M.Arch., Columbia University, 2007
- Partner / Design Director, Versa Design; Architect III, HNTB Architecture.

Jacobs, Michael
Adjunct Assistant Professor of Architecture
- B.A. Lehigh University, 1992; M.Arch. Columbia University, 1997

- Owner, Mike Jacobs Architecture. 2007 AIA San Fernando Valley Design Award, 2003 AIA Los Angeles "NextLA" Award. Interest in urban and industrial brownfields.

Johnson, Jeffrey
Adjunct Assistant Professor of Architecture
- B.S. Environmental Design, Ball State University, 1990; B.Arch., Ball State University, 1990; M.Arch., Ball State University, 1992.
- Principal, SLAB architecture PLLC. Founding Director of China Lab, GSAPP.

Kallipoliti, Lydia
Adjunct Assistant Professor of Architecture
- Dipl. Arch-Eng, Aristotle University of Thessaloniki, 2001; SMArchS, Massachusetts Institute of Technology, 2004; M.A., Princeton University, 2007
- Founding Principal, EcoRedux Network; Senior Associate, Cooper Union Institute of Sustainable Design.

Kaseman, Keith
Adjunct Associate Professor of Architecture
- B.S., Arizona State University, Tempe, 1995; M.Arch., Columbia, 2001. Winner, Pentagon Memorial competition, 2003.

Keto, Victor
Adjunct Assistant Professor of Architecture
- B.Arch., New Jersey Institute of Technology, 2004; M. Eng. in Product Architecture and Design, Stevens Institute of Technology, 2006
- Technical Project Manager, Gehry Technologies

Kienzl. Nico
Adjunct Assistant Professor of Architecture
- Dipl. Ing. Architecture, Technical University Munich, 1995; M.S.Building Technology, Massachusetts Institute of Technology, 1999; D.Des, Graduate School of Design, Harvard University, 2002.
- Director, Atelier Ten, New York. Application of advanced building analysis including facade optimization, daylight and shading. Optimization of building systems.

Kim, Janette
Adjunct Assistant Professor of Architecture
- B.A., Columbia College, Columbia University, 1997; M.Arch., Princeton University, 2001
- Founding Principal, All of the Above; Director, Urban Landscape Lab, GSAPP. Focus on the construction of ecologies in relationship to public identity, opinion, and debate.

Klein, Karel
Adjunct Assistant Professor of Architecture
- BS, Architecture, 1992; BS, Civil Engineering, 1993, University of Illinois; M Arch, Columbia University, 1996
- Director, Ruy Klein. Emerging Voices Award, The Architectural League of New York, 2011; Avant Guardian Award, Most Innovative Practices, Surface Magazine, 2009

Konyk, Craig
Adjunct Assistant Professor of Architecture
- B.A. in Architecture, Catholic University, 1981; M.Arch., University of Virginia, 1983.
- Principal, KONYK architecture pc.

Kostura, Zachary
Adjunct Assistant Professor of Architecture
- B.S. Physics, James Madison University, 2002; B.S. Integrated Science and Technology, James Madison University, 2002; M.Eng., Massachusetts Institute of Technology, 2003
- Structural Engineer, Arup.

Kudo, Kunio
Adjunct Assistant Professor of Architecture
- B. Arch., 1963; M. Arch.,1965; D. Eng., 1969; Tokyo Institute of Technology; M. Arch. Harvard University, 1978

- Regional Science Research Fellow, University of Pennsylvania, 1969-1971; American Study Fellow, Brown, 1977-1978.

Kumpusch, Christoph
Adjunct Assistant Professor of Architecture
- B.Arch., Angewandte / University of Applied Arts-Vienna, 2000; Diploma, Berlage Institute - Rotterdam, 2001; Thesis, Cooper Union, 2002; M.Arch., Angewandte / University of Applied Arts – Vienna, 2006; PhD, Angewandte / University of Applied Arts – Vienna, 2012
- Principle, c.a.k productions; Director / Partner, ForwardSlash.

Kurgan, Laura
Associate Professor of Architecture, Director of Visual Studies
- B. A. in Architecture, University of California, Berkeley, 1984; M. Arch., Columbia University, 1988.
- Principal, Laura Kurgan Design LLC. Director, Spatial Information Design Lab. Combines architectural research with design, information, communication, advocacy and public work.

Kushner, Marc
Adjunct Assistant Professor of Architecture
- BA, University of Pennsylvania, 1999; M.Arch, Harvard University, 2004
- Partner, HWKN (HollwichKushner); CEO, Architizer.

Laufs, Wilfried
Adjunct Assistant Professor of Architecture
- Cand.-Ing. Architecture, RWTH Aachen/Germany, 1993; Dipl.-Ing. Structural Engineering, RWTH Aachen/Germany, 1996; Dr.-Ing. (PhD) Structural Engineering, RWTH Aachen/Germany, 2000; International Welding Engineer (IWE), SLV Duisburg/Germany, 2000.
- Owner & Principal, Laus Engineering Design LLC.

Leeser, Thomas
Adjunct Assistant Professor of Architecture
- B. Arch (Vordiplom), ,Technische Hochschule Darmstadt, Darmstadt, Germany, 1979; M.Arch (Dipl. Ing.)., Technische Hochschule Darmstadt, Darmstadt, Germany, 1985
- Principal, Leeser Architecture

Levrat, Frederic
Adjunct Assistant Professor of Architecture
- Diplome of Architecture, Federal Institute of Technology Lausanne – 1990
- Founder and Principal, Levrat Design, New York; Best 6 Young American Architects, the New York Architectural League, 1997.

Lichten, Kevin
Adjunct Assistant Professor of Architecture
- B.A., Brown University, 1974; M. Arch., Yale University, 1977
- Principal, Lichten Craig Architects LLP

Lignano, Giuseppe
Adjunct Assistant Professor of Architecture
- M.Arch. Universita' Federico II, Naples, Italy, 1989; Visiting Scholar., Columbia University, 1990-1991
- Founding Principal, LOT-EK; Adaptive reuse ("upcycling") of existing industrial objects and systems not originally intended for architecture.

Liu, Chang
Adjunct Assistant Professor of Architecture
- B.A., Tsinghua University, Beijing, 1997; M.A., Tsinghua University, Beijing, 2000; Ph.D., Tsinghua University, Beijing, 2002
- Recently published: *Studies on Proportion and Dimension of Ancient Wood Structures in China* [with Wang & Duan] (China Press of Building Industry, 2011)

Manaugh, Geoff
Adjunct Assistant Professor of Architecture
- B.A., UNC-Chapel Hill, 1997; M.A., University of Chicago, 2001

- Contributing Editor, *Wired* UK; Co-Director, Studio X-NYC.

Marble, Scott
Adjunct Assistant Professor of Architecture
- B.E.D., Texas A&M University, 1983; M. Arch., Columbia University, 1986
- Founding Partner, Marble Fairbanks; Young Architects, Architectural League of New York, 1992; A.I.A. Design Award, 1994, 1996, 1997, 1999.

Marino, Robert
Adjunct Assistant Professor of Architecture
-B Engineering, Stevens Inst. Of Technology, 1971; M Arch., Princeton University, 1982
-Founder and Principal, Robert Marino Architects;

Martin, Reinhold
Professor of Architecture, Director, Ph.D. Architecture Program
- B. Arch/B. Bldg. Sci., Rensselaer Polytechnic Institute, 1987; Grad. Dipl., Architectural History and Theory, Architectural Association, 1991; PhD, Architecture, Princeton University, 1999
- Partner, Martin/Baxi Architects; Director, Temple Hoyne Buell Center for the Study of American Architecture, Columbia University; Founding co-editor, *Grey Room*

Mayer, Juergen
Adjunct Assistant Professor of Architecture
- Diplom-Ing. Architektur, Stuttgart University, 1992; M.Arch., Princeton University, 1994
- Principal of J. MAYER H. Architects, Berlin

McLeod, Mary
Professor of Architecture
- B.A., 1972; M.Arch.,1975; M.A., 1976; Ph.D., Architecture, 1985, Princeton University.
- Social Science Research Council Fellow, France, 1977; Fulbright/Hayes, France, 1977. NEH, 1987; New York State Council on the Arts, 1998; Graham Foundation for Advanced Studies in the Fine Arts, 2009.

Modesitt, Adam
Adjunct Assistant Professor of Architecture
- B.A., Wesleyan University, 2000; M.Arch I, Harvard University Graduate School of Design, 2007

Morrison, John
Adjunct Associate Professor of Architecture
- B.A., Gallatin School of Individualized Study, New York University, 2000; M.Arch., Princeton University, 2009
- Associate, Lewis.Tsurumaki.Lewis.

Nakagawa, Junko
Adjunct Assistant Professor of Architecture

Negro, Federico
Adjunct Assistant Professor of Architecture
- B.S. Architectural Studies, University of Illinois at Urbana-Champaign, 2002; M.Arch, Parsons the New School for Design, 2004
-Founder, Case Inc.

Norris, Davidson
Adjunct Associate Professor of Architecture
= B.A., Williams College, 1970; M.Arch., Yale University, 1977

Orff, Kate
Assistant Professor of Architecture
- B.A., University of Virginia, 1993; M.L.Arch., Harvard University, 1997
- Principal, SCAPE LLC.
-Licensed Landscape Architect

Otani, Robert
Adjunct Assistant Professor of Architecture
- B.S. Civil Engineering, Rutgers University, 1990; M.S. Civil Engineering, Penn State University, 1995
- Vice President, Thorton Tomasetti

Parker, Phillip
Adjunct Associate Professor of Architecture
- B.D. Arch., University of Florida, 1977; M.Arch., Yale University, 1984
- Principal, Philip Parker Architects. Registered Architect.

Amanda Parkes
Adjunct Assistant Professor of Architecture
-B.S.E., Product Design, Stanford University, 1996
-B.A., Art History, Stanford University, 1996
-PhD, Tangible Media, MIT Media Lab, 2009

Patel, Raj
Adjunct Assistant Professor of Architecture
- B.Eng., Engineering Acoustics and Vibration. University of Southampton, 1993
- Principal, ARUP

Preston, Jennifer
Adjunct Assistant Professor of Architecture
- B.Evnd., University of Colorado at Boulder, 2000; M.Arch., Columbia University, 2008
- Sustainable Design Director, BKSK Architects

Quennell, Nicholas
Associate Professor
- Dipl. Arch., Architectural Association, London, 1957; M.L.A., Harvard University, 1969
- Partner, Nicholas Quennell

Ramus, Joshua Prince
Adjunct Assistant Professor of Architecture
- B.A. in Philosophy with distinction., Yale University,1991; M.Arch., Harvard University,1996; SOM Fellow; Araldo Cossutta Fellow.
- Partner, REX

Rakatansky, Mark
Adjunct Associate Professor of Architecture
- B.A., University of California at Santa Cruz, 1979; M. Arch., University of California at Santa Cruz, 1982
- Principal, Mark Rakatansky Studio, Brooklyn 1982-present

Roche, Francois
Adjunct Assistant Professor of Architecture
- M.A. Arch., École nationale supérieure d'architecture de Versailles, 1988

Rock, Michael
Adjunct Assistant Professor of Architecture
- A.B., Union College, 1981; M.F.A., Rhode Island School of Design, 1984
- Director, Graphic Architecture Project. Parnter, 2x4 Inc., New York,

Rothstein, Karla
Adjunct Associate Professor of Architecture
- B.Arch., University of Maryland, 1988; Certificate of Academic Exchange. Moscow Institute of Architecture, 1989; Certificate of Academic Exchange. Eidgenössische Technische Hochschule, 1991; M.Arch., Columbia University, 1992
- Design Director and co-founder, Latent Productions. Registered Architect.

Roy, Lindy

Adjunct Assistant Professor of Architecture
- B.Arch Studies., University of Cape Town, 1984; M.Arch., Columbia University, 1990
- Founding Principal, Roy Design; 2001 MoMA/P.S.1 Young Architect program winner.

Safran, Yehuda
Adjunct Associate Professor of Architecture
- Graduate of Advanced Course in Sculpture, Saint Martin's School of Art, London, 1970
- M.A., The Royal College of Art, London, 1972
- Ph.D. Research, University College, London, 1972-1975

Sample, Hilary
Associate Professor of Architecture
-B.Arch., Syracuse University, 1994
-M.Arch., Princeton University, 2003

Sanger, Victoria
Adjunct Assistant Professor of Architecture
- A.B., Harvard University, 19XX; M.A. Art History, Columbia Univerisity, 1993; M.Phil. Art History. Columbia University, 1994; Ph.D. Art History, Columbia University, 2000

Schlossberg, Edwin
Adjunct Assistant Professor of Architecture
- B.A., Columbia University, 1967; M.S. and Literature, Columbia University, 1969; Ph.D., Columbia University, 1971
- Founder/ Principal Designer, ESI Design. A pioneer in the design of collaborative public experiences and communications networks.

Schmid, Veronika
Adjunct Assistant Professor of Architecture
- Dipl. Arch., Architectural Association, London, 1998; M.Arch II, University of California at Los Angeles, 2001
- Director, Impossible Productions Ink LLC. Director, ipi-Go New York.

Scott, Felicity
Associate Professor of Architecture
- B.Arch., First Class Honors, Royal Melbourne Institute of Technology, 1991; M.A.U.D. with Distinction, Harvard University, 1994; M.A., Princeton University,1997; Ph.D., Princeton University, 2001
- Founding Editor, *Grey R*oom. J. Paul Getty Postdoctoral Fellowship in the History of Art and the Humanities, 2002-2003; Henry Luce/ACLS Doctoral Dissertation Fellowship in American Art, 1998-1999; Harold W. Dodds Fellowship, Princeton, 1997-1998.

Seewang, Laila
Adjunct Assistant Professor of Architecture
- B.S. Environmental Design, University of Tasmania, 1999; B.Arch., The Cooper Union, 2005; M.Arch., Princeton University, 2008
- Principal, Laila Seewang Architect. Her current research centers on theories of urban design, specifically the political and social effects of infrastructure throughout history.

Segal, Paul
Adjunct Professor of Architecture
- A.B., Princeton University, 1966; M.F.A. Architecture, Princeton University, 1969
- Independent Design Consultant, Paul Segal FAIA. President, New York Chapter, A.I.A., 1985-1986; trustee, Preservation League of New York State; president, New York Foundation for Architecture. Registered architect.

Shepherd, Cassim
Adjunct Assistant Professor of Architecture
- B.A., Harvard University, 2001; M.A., University of London, Kings College, 2004; M.C.P., Massachusetts Institute of Technology, 2007
- Editor, *Urban* Omnibus. He produces non-fiction media --- most often in prose, film or video --- about

cities, buildings and places.

Shane, David

Sherer, Daniel
*Adjunct Assistant Profes*sor of Architecture
- B.A., Yale College, 1985; Ph.D., Harvard University, 2000
- Mellon Fellow in the History of Art, Harvard, 1992-1995; Charles Eliot Norton Travelling Fellow, Harvard, 1993; Oscar Cutler Fellow, Harvard, 2000.

Shigematsu, Shohei
Adjunct Assistant Professor of Architecture
- B.S. Arch., Kyushu University, Fukuoka, Japan, 1996; M.Arch., Kyushu University, Fukuoka, Japan, 1997; Postgraduate Laboratory of Architecture, The Berlage Institute, 1998.
- Partner, Office for Metropolitan Architecture. Director of OMA New York. Partner in charge of Cornell University's new building for the College of Architecture, Art and Planning and project leader for the winning competition entry for the CCTV headquarters.

Silman, Robert
Adjunct Assistant Professor of Architecture
- B.A., Cornell University, 1956; B. Civil Engineering, New York University, 1960; M. Civil Engineering, New York University, 1963.
- President, Robert Silman Associates, Structural Engineers. Recipient of the AIA New York Chapter Award. International Leader in the promotion of sustainable design, and has ample experience in historic preservation.

Snooks, Roland
Adjunct Assistant Professor of Architecture
- B.App.Sci. Environmental Design, University of Canberra, 1998; B.Arch., Royal Melbourne Institute of Technology Univeristy, 2003; M.S.A.A.D., Columbia University, 2006.
- Design Director and a Founding Partner of Kokkugia. Designer and programmer focused on emergent design methodologies involving genetic and agent-based techniques.

Solomonoff, Galia
Assistant Professor of Architecture
- Architect, School of Architecture, National University of Rosario, Argentina, 1986; B.S. Arch., The City College, City University of New York, 1991; M.Arch., Columbia University, 1994
- Founder & Creative Director, Solomonoff Architecture Studio. McKim Prize for Excellence in Design, National Endowment for the Arts grant, 2000; Architectural Record Design Vanguard, 2003; Architectural League Emerging Voices, 2002. Board member, Tenement Museum. New York registered architect.

Szot, John
Adjunct Assistant Professor of Architecture
- B.Arch., University of Texas at Austin, 1998; M.S.A.A.D., Columbia University, 2001
- Partner, Brooklyn Digital Foundry. Principal, John Szot Studio. One of the executive directors of the Experimental Modern Arts Collective.

Taglaiabue, Benedetta
Adjunct Assistant Professor of Architecture
- Architect, Istituto Universitario di Architettura di Venezia, 1989.
- Partner, Miralles Tagliabue EMBT. Award-winning architect recipient of the RIBA Stirling Prize 2005, the Centenary Medal from Edinburgh Architectural Association and the 2005 Spanish National Architecture Prize ‘Manuel de la Dehesa’, for the Scottish Parliament building.

Taylor, Mark
Adjunct Assistant Professor of Architecture
- B.A., University of Vermont, 1989; M.S.R.E.D., Columbia University, 2001.
- Director of Operations, Columbia University.

Thelen, Neil
Adjunct Assistant Professor of Architecture
- B.F.A. Sculpture, College of Visual Arts, 1998; M.Arch, University of Michigan, 2005.
- Project Consultant at Front Inc. Visiting Consultant for the Columbia Building Intelligence Program. Research in Parametric Design and BIM.

Tolla, Ada
Adjunct Assistant Professor of Architecture
- M.Arch. Universita' Federico II, Naples, Italy, 1989; Visiting Scholar, Columbia University, 1991.
- Founding Principal, LOT-EK; Adaptive reuse ("upcycling") of existing industrial objects and systems not originally intended for architecture.

Tomisaki, Paula
Adjunct Assistant Professor of Architecture
- M.Arch., Morón University, Buenos Aires, Argentina, 2000; M.S.A.A.D., Columbia University, 2006.
- Principal, Archybrid. Recipient of the Smart Geometry Group scholarship in 2007 to research on parametric design.

Tschumi, Bernard
Professor of Architecture
- Dipl. Arch., Federal Institute of Technology (ETH), Zürich, Switzerland. 1969
-Principal, Bernard Tschumi Architects. Former Dean, Arts Council of Great Britain, 1975. National Endowment for the Arts, 1979. Member, College International de Philosophie, Chevalier des Arts et des Lettres, and Legion of Honor, France. Registered architect.

Twilley, Nicola
Adjunct Associate Professor of Architecture
- B.A. First Class, University of Leeds, United Kingdom, 2000; M.A., University of Chicago, 2001.
- Director, Studio-X NYC.

Uhl, Christian
Adjunct Associate Professor of Architecture
- B.A. Painting, Miami University, 1993; B.E.D., Miami University, 1993; M.Arch., Bartlett School of Architecture, UCL 1999; The Independent Study Program, Whitney Museum, New York, 2000
- Project Architect, Smith-Miller + Hawkinson Architects.

Uhl, Joshua
Adjunct Associate Professor of Architecture
- B.E.D., Miami University, 1995; M.Arch., Columbia University, 2002
- Director of Design, Toshiko Mori Architect. McKim/Kaplan Prize, 2002; SOM Traveling Fellowship, 2002. Member, AIA. Registered architect.

Varnelis, Kazys
Adjunct Assistant Professor of Architecture
- A.A, Social Sciences, Simon's Rock at Bard College, 1986; B.S. History of Architecture, Cornell University, 1988; M.A. History of Architecture and Urban Development, Cornell University, 1990
Ph.D. History of Architecture and Urbanism, Cornell University 1994;

- Co-Founder of UDC.Director of Network Architecture Lab. His research focuses on contemporary architecture, late modernism, architecture and capitalism, and the impact of changes in telecommunications and demographics on the contemporary city.

Varughese, Aniju
Adjunct Assistant Professor of Architecture
- M.S.C.E., Columbia University, 2005; M.S.C.E., Cooper Union, 2002
- Façade Engineer, Thornton Tomasetti. Visiting Engineer in the Roving Engineers Program.

Vidich, Joseph
Adjunct Assistant Professor of Architecture
- B.A., Wesleyan University, 2000; M.Arch, Columbia University, 2008.
- Founder and Principal, PrePost. Exhibited at the Venice and Beijing Biennale and SFMoMA.

Vos, Daniel
Adjunct Assistant Professor of Architecture
- B.A. in Art and French, Calvin College, 1999; M.Arch, Columbia University, 2004.
- Architect, R. A. Heintges and Associates, New York.

Walker, Enrique
Associate Professor of Architecture
- Architect (Honors), Universidad de Chile, 1992; M.A., Architectural Association, 1995; Ph.D., Architectural Association, 2012.
- Director of the Master of Science in Advanced Architectural Design Program. Amongst his published work is *Tschumi on Architecture: Conversations with Enrique Walker* and *Lo ordinario.*

Wallance, David
Adjunct Assistant Professor of Architecture
- B.Arch., The Cooper Union, 1980
- Principal, David Wallance Architect PLLC. Member, A.I.A. Registered architect.

Wasiuta, Mark
Adjunct Assistant Professor of Architecture
- B.S. Georgia Institute of Technology, 2001; M.Arch, Columbia University, 2006.
- Partner. International House of Architecture. His research focuses on the architectural turn to "environment" in the post-war, from the discourse on environmental design, to social theories of environment and behavior, and to "environmental" experiments with electronics and computation.

Wei, Kevin
Adjunct Assistant Professor of Architecture
- B.Arch., Carnegie Mellon University, 2006; M.S.A.U.D., Columbia University, 2008; Graduate Certificate in Advanced Architectural Research. Columbia University, 2009
- Designer/Owner, Kevin Wei New York. Architect and jewelry designer exploring complex patterns, rhythmic assemblies, and other novel tectonics to create miniature formal concepts for the body.

Wigley, Mark
Dean, Professor of Architecture
- B.Arch. University of Auckland, 1979; Ph.D. Architecture,University of Auckland, 1987.
- Resident fellowship, Chicago Institute for Architecture and Urbanism, 1989; International Committee of Architectural Critics (C.I.C.A.) Triennial Award for Architectural Criticism, 1990; Graham Foundation Grant, 1997.

Williams, Sarah

Adjunct Assistant Professor of Architecture
- B.A. History and Geography, Clark University, 1997; M. City Planning, Massachusetts Institute of Technology, 2005
- Co-Director of Spatial Information Design Lab, Columbia University. Researcher and programmer focusing on innovative mapping and data visualization techniques to highlight urban issues.

Willis, Carol
Adjunct Assistant Professor of Architecture
- B.A., Boston University, 1971; M.A., 1976; M.Phil., Columbia, 1979.
- Graham Foundation, 1998; New York State Council on the Arts, 1997, 1999, 2000; IMLS, 2001. Founder and director, the Skyscraper Museum, New York City.

Wilson, Mabel
Associate Professor of Architecture
- B.S. Arch., University of Virginia, 1985; M.Arch., Columbia University, 1991; Ph.D. American Studies, New York University, 2007
- Principal, 6Ten Studio. MacCraken Fellowship, New York University, 1995; visiting scholar, Getty Research Institute, 2002. Member, American Studies Association.

Wright, Gwendolyn
Professor of Architecture
- B.A. History, Art History, New York University, 1969; M.Arch. U.C. Berkeley, 1974; Ph.D., U.C. Berkeley, 1978
- Woodrow Wilson Fellowship, 1977; Ford Foundation Fellowship, 1979-1980; NEH Fellowship, 1980-1982; Stanford Humanities Center Fellowship, 1982-1983; University of Michigan, Institute for the Humanities Fellowship, 1991; Getty Center for the History of Art and the Humanities Fellowship, 1992-1993; New York Institute for the Humanities Fellow, 1983-1992; Guggenheim Fellow, 2004-2005.

Yang, Soo-in
Adjunct Assistant Professor of Architecture
- B.E., Yonsei University, South Korea, 1998
- M.Arch., Columbia University, 2005

Young, Bryan
Adjunct Assistant Professor of Architecture
- B.A. Architecture, University of California at Berkeley, 1997; M.Arch., Harvard University Graduate School of Design, 2003
- Principal, Young Projects LLC.

Young, Michael
Adjunct Assistant Professor of Architecture
- B.Arch., California Polytechnic State University San Luis Obispo, 1997; M.Arch., Princeton University, 2005
- Partner, Young & Ayata. Architect and educator exploring novel formal and organizational possibilities in architecture and urbanism, departing from historical processes towards an engagement with cultural issues that influence and are influenced by our environment.

Zientek , Andrew
Adjunct Associate Professor of Architecture
- B.S.L.Arch., University of Wisconsin, 2002; M.L.Arch., Harvard University, 2011.
- Principal, Andrew Zientek Landscape. Research on the sustainability of cities and civilizations through gradual transformation of culture, and our position within and with respect to the natural universe.

I.4. Policy Review

All items listed below from Appendix 3 of the 2009 Conditions for Accreditation will be provided in the Visiting Team Room.

Studio Culture Policy
Self-Assessment Policies and Objectives
Personal Policies including
- *Position descriptions for all faculty and staff*
- *Rank, Tenure, and Promotion*
- *Reappointment*
- *EEO/AA*
- *Diversity (including special hiring initiatives)*
- *Faculty Development, including but not limited to; research, scholarship, creative activity, or sabbatical.*

Student-to-Faculty ratios for all components of the curriculum (i.e., studio, classroom/lecture, seminar)
Square feet per student for space designated for studio-based learning
Square feet per faculty member for space designated for support of all faculty activities and responsibilities
Admissions Requirements
Advising Policies; including policies for evaluation of students admitted from preparatory or pre-professional programs where SPC are expected to have been met in educational experiences in non-accredited programs
Policies on use and integration of digital media in architecture curriculum
Policies on library and information resources collection development
A description of the information literacy program and how it is integrated with the curriculum.

Part Two (II). Educational Outcomes and Curriculum

II.1.1. Student Performance Criteria

Overview of the Program Curricular Goals and Content

As outlined in the above sections, the M.Arch curriculum seeks a holistic integration of all elements of the design studio, history/theory, technology, visual studies and professional practice classes, with the studio sequence outlined below acting as the heart of this unified curriculum.

Core Studios: The three-semester Core Studio sequence develops a capacity to work with skill and invention at all levels of architectural design. Studio methods vary with each of the design critics, but there is a common desire to rethink architectural and urban problems at each phase of developing a project. Explorations include new organizations of building processes, new systems of manufacturing and construction, and new considerations of use and programming. In the most recent years, both A4001 Core Studio I and A4002 Core Studio II have focused on more complex, program-intensive projects than in the past but work is sequenced in both the studios and in the overall Core curriculum to assure faculty and students have appropriate time to fulfill expectations. Studio sites in these years have been based in demanding urban sites with multiple and evolving constituencies. Focused on sites in New York City, the studios seek to develop analytical and design skills, understanding the sequencing, interplay and needs or requirements of programmatic spaces, and understanding and responding to the complexity and diversity of local constituencies. The designs employ an array of local and global data sets, and an analysis of historic urban form and architectural typology. They project potentials for new programming and redevelopment issues that ultimately reshape the city. The studios also seek to coordinate work in tectonics and structure with the full breadth of architectural demands. Each faculty member offers a unique method of exploring these issues while also acting as a member of a teaching team so that all students benefit from this individual expertise. Studios are discrete and lead by each critic but there is a shared program as well as core deliverables for the entire Core Studio. These are established by the faculty but the overall leadership is by the Coordinator who works closely with the Directors.

As a whole the Core is coordinated to give structure to the studios in a sequence of ascending difficulty. A4001 Core Studio I and A4002 Core Studio II differ in the scope and length of projects: Core Studio divides the semester into three distinct phases that build in scale, scope and complexity. The exercises that fold into the development of a completed architectural proposal in Core Studio I are phased with a goal of quickly gaining momentum in the semester's first week; a short analysis project begins the terms and establishes a focus on both the literal work of an architect (drawing, representation, documentation) but also on aspects of the environment. Two projects follow this with the third and final project taking nearly 70% of the semester and culminating with a small building proposal. The final project has usually been for an academic laboratory program and for Columbia University. It is sited near campus and is urban in nature but also a part of the hybridity of Columbia and Upper Manhattan. Core Studio II traditionally focuses on an institutional building, bringing together the questions of program, site and typology to the forefront. It is the first time in the Core sequence that students are confronted with translating ideas and the complexities of program and site into a well developed and complete building, which engages structure as well as environmental concerns and builds upon the rigorous and guided process learned in Core I. Recently, the move from past museum and

library projects as explorations to that of a bank has further emphasized the importance of program, site, and social conditions. With a site chosen specifically for its charged historical past of deep activism and its current process of gentrification, and the social and economic climatic of changing financial systems, students were asked to re-imagine how different program narratives could actively contribute to the public good and invest in community service, positively transforming and supporting their local territory.

The third and final semester of the sequence, A4003 Core Studio III, is focused on the design of large-scale urban housing. Students work in teams of two and carry each project to a high level of resolution in terms of materials, details and demographic, social and political needs. The studio site is within metropolitan New York, but the design work is equally based on a renewed analysis of the history of housing policies both in New York and in the United States. Students are asked to bring the analytical expertise of the first two semesters to these issues, and to create a project that addresses a full spectrum of concerns from the immediate detail to the larger urban and political consequences of design.

Advanced Studios: The final three-semester sequence of Advanced Studios in the architecture program builds upon the basic skills gained in the Core Studio sequence, but also diverges in significant ways. The Advanced Studios extend the student's capacity for more independent, investigative thinking about architecture and urban life. A wide range of topics and projects are offered each semester and critics present studio projects that relate to their specific areas of research and expertise. The options in the first advanced studio in the fourth semester emphasize applied research in materials, computation and fabrication. The fifth semester doubles the number of optional studios and opens up the range of programs and includes joint studios with Historic Preservation, the School of Engineering and the Real Estate Development program and some studios travelling to an international site. The options in the last advanced studio in the sixth semester emphasize global engagement with sites and programs dispersed globally with all students and faculty travelling to the international site of their design projects, usually in one of the Studio-X locations – funded by Kinne fund travel grants. The Advanced Studio sequence fosters an experimental design culture sensitive to the many different roles played by architects in contemporary society and understanding architecture as a continuously developing field.

The fifth and sixth semesters studios combine students graduating in the first professional program—Master of Architecture—and the final two semesters of the Master of Advanced Architecture Design program, which increases the variety of options and sustains a very rich transfer of knowledge from the students who already have a professional degree to those who are completing a professional degree. As many as eighteen studios are offered for students in both programs; each is led by either a full time faculty member at Columbia or a visiting professor, often in teams that combine professional expertise. These studios address new realms of urban and architectural practice, in particular, work on environmental remediation, energy use, water, irrigation and sewage systems, transportation and infrastructure, zoning, emergency housing, Many of the advanced studios in the last three semesters are additionally supported by outside sponsors as part of ongoing research collaborations. These include studios concentrating on materials (LaFarge concrete, the Vinyl Institute), on software and collaboration (Columbia Building Intelligence Project [C-BIP] with Oldcastle Building Envelope, Autodesk) on data (The Advanced Data Visualization Project [ADVP] with Thompson Reuters), on urban mobility (Experiments in Motion with AUDI), etc.

The Advanced Studios seek new definitions of the architect's responsibility and capacity to contribute to society. This innovation relies on the energy and contribution of the students and

faculty to jointly create a new benchmark with each graduating class. The deep collaborative spirit and mutual assistance between faculty in reviews allows for a rich exchange of ideas and supportive criticism, so that the discoveries and good practices generated in one studio or semester, are developed further in adjacent or subsequent studios. The result is a lively and demanding think-tank in which students are simultaneously guided towards the best practices of the discipline and encouraged to participate in the development of new practices. This stimulating and productive studio culture is the energetic heart of the School.

Student Performance Criteria

Realm A: Critical Thinking and Representation:

A.1. Communication Skills:
Ability to read, write, listen, and speak effectively.

The required courses **A4001 Core Studio I**, **A4348 History of Architecture I 1750 – 1850**, and **A4349 History of Architecture II 1850 – 1930** demonstrate ability of this criterion.

The ability to read, write, listen and speak effectively are treated as absolutely basic to both the professional and academic sides of the architectural discipline. They are essential to each and every part of the curriculum. The architect is understood to be someone who communicates the highest ambitions for the built environment to a wide range of audiences in writing, drawings and speech. Lecture courses are examined through written papers, seminars require individual presentations and a paper, and studio courses turn on the verbal presentation of design projects and discussion with critics and members of the community. With each of the last years, GSAPP has been steadily raising the academic standards of its admitted students so that the History/Theory part of curriculum could work in closer partnership with the strength of the design culture of the school. Likewise, the language ability standards have been raised to address previous concerns about the limited communication abilities of some international students. The use of a new benchmark for GRE scores for verbal sectors of the exams and for TOEFL scores established a more focused attempt to identify and admit students whose critical writing skills would develop equally to those in design and technology. The general reaction is that there has been a significant improvement in writing and speaking skills.

From **A4001 Core Studio I** on, students are expected to make concise and coherent verbal presentations. Student studio projects also increasingly include written statements, presentation of research data, or required explanatory booklets. Examples are evident in studios taught by Laura Kurgan, Scott Marble, Giuseppe Lignano/Ada Tolla, Shohei Shigematsu**,** and Janette Kim.

A high level of reading, writing, and speaking ability is demanded in the required **History/Theory** Sequence and in upper level seminars where students are expected to make verbal presentations of complex ideas and produce coherent written work. The core History/Theory classes have extensive reading requirements, presentations in precepts based on readings and listening to the lectures and writing assignments.History/theory classes also increasing call for unique written assignments that go beyond a typical single class paper. Examples are evident in classes taught by Kenneth Frampton (**A4616 World Architecture and Critical Regionalism**), Mark Wigley (**A4469 The History of Architecture Theory**), Kazys Varnelis (**A4515 Network Culture**), Mary McLeod (**A6190 Rule vs. Freedom: Theoretical Explorations in European Architecture),** Felicity Scott (**A4705 Architecture after 1945**), and Craig Buckley (**A4566 Architecture, Print, Politics: Case Studies 1945 to 1975**.

A combination of graphic and verbal communication skills are taught in the required **Visual Studies** sequence, (**A4023 Architectural Drawing and Representation I**, and **A4024 Architectural Drawing and Representation II**) and is advanced in particular classes such as Ed Schlossberg's **A4764 Communicating Complex Ideas in Public Settings**. Written ability is further demanded in Technical Reports required on various subjects in the **Building Science and**

Technology curriculum. Verbal communication of architectural ideas is refined in reviews and student presentations throughout the design studio sequence.

A. 2. Design Thinking Skills:
Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test them against relevant criteria and standards.

The required courses **A4001 Core Studio I, A4002 Core Studio II**, and **A4003 Core Studio III** demonstrate ability of this criterion.

The general culture of the School is one of critical debate on the best practices and possible futures of the architectural profession combining a detailed knowledge of the traditions and good practices of the field with collaborative experimentation. Every aspect of the School is devoted to enhancing critical thinking skills. The great density of different points of view, as communicated by the polemical variety of approaches in the **Advanced Design** studios and elective **History/Theory** seminars and **Visual Studies** workshops, along with the huge array of visiting speakers and events each semester, and the interdisciplinary exchanges with the other programs housed in the same school, compels each student to identify their particular position on each architectural issue, develop it with the help of the appropriate mix of teachers, and communicate it clearly to a variety of audiences. The fact that each student and teacher has to clearly articulate their particular position enables the work to be tested against its specific goals and allows people with different points of view to contribute in a supportive manner.

A carefully structured sequence of design studios: **A400l Core Studio I**, **A4002 Core Studio II**, and **A4003 Core Studio III**, assure that all students, including those with little background in architecture, are adept in the fundamental principles of analysis and evaluation of architectural issues necessary for design work. The revised curriculum for Core Studio I initiates a program-long demand for precise design thinking to match the conceptual, programmatic and technical skills being developed. A comprehensive review held at the conclusion of the first year helps to monitor progress and identify students having difficulty. In design juries throughout the program there is a commitment to a standard of clarity and intelligibility of thought. This examination of architectural issues is taken up in greater depth in the **Advanced Studio** sequence. At a theoretical level, design analysis and evaluation are critical methods as well. Design thinking is central to many History/Theory Classes. Kenneth Frampton's **A4229 Studies in Tectonic Culture,** for example**,** examines the role played by structure and construction in the development of modern form through comparative analysis and Enrique Walker's **A4803 The Dictionary of Received Ideas** seminar. Likewise, design analysis is used as a method of teaching in the **Building Science and Technology** sequence. Most specifically, **A4114 Architectural Technology IV** requires a six-week long analysis problem to study systems of a recent American contemporary building.

A. 3. Visual Communication Skills:
Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the program.

The required courses **A4001 Core Studio I, A4023 Architectural Drawing and Representation I**, and **A4024 Architectural Drawing and Representation II** demonstrate ability of this criterion.

As with the rest of the curriculum, graphic and modeling skills are taught through a combination of core fundamental training and advanced experimental work. The Core Studio sequence continuously stresses the central role that visual communication plays in conceiving, developing and persuasively presenting design thinking with the most relevant tools, analog and digital. Students are asked to use the full range of techniques from sketches, diagrams, plans, sections, perspectives, through to photography, video and the advanced use of digital and multi-media, and multi-platform formats. In parallel with the studio sequence, students are required to take fundamental courses in a range of representational modes (hand drawing and modeling, digital drawing and modeling, video and mapping) before choosing the advanced options that suit their needs and goals. Required **Visual Studies** courses are taught in large lecture classes with small group tutorials and reviews, and are supplemented where necessary by intense weekend sessions on specific techniques. Advanced electives are taught as six-week workshops. At the beginning of each semester, up to 30 advanced options are presented to the students in a lottery where each teacher explaining the methods, tools which their classes will use. Teachers are consistently updating their courses to align with updates in software and new software. . This organization of multiple offerings coupled with shorter more intensive courses has proven to be a major success and has expanded to include a few **Building Science and Technology** electives. This new system has enabled the School to offer a much wider range of classes and has enabled students to choose more directed paths through the curriculum(parametric design and scripting go hand in hand, while mapping and large scale ecological urbanism represent another track). Computer classes are treated in the same as any other representational mode, in a way that resonates with the School's increasingly multi-media approach (linking computer drawing and modeling to hand-drawing, photography video to animation, modeling to digital fabrication and BIM, writing to drawing, graphic presentations and websites etc). Classes in material construction are increasingly taught alongside those in software construction.

If any group of students feels like some aspect of basic computer software classes is deficient, an assigned tutor coordinates a newly targeted course to address the new content with support from the School provided where needed. This frees up the **Visual Studies** workshops to engage at the highest level. This system allows a much greater diversity of approach than an earlier phase of the School where computer rendering dominated over other forms and each student tended to remain within a particular software platform. Students are so accomplished with the computer that it is no longer of great significance that they use computers and most of them are reaching the technique that best suites their design thinking – both analog and digital. Physical model making in particular has returned as a major part of studio culture.

The introduction of this new **Visual Studies** workshop system had an immediate positive impact on the way the students model, represent, and analyze their studio projects. There is a greater variety of approaches and a higher level of expertise demonstrated from the very first studio onwards. The new approach is multi-media and multi-platform and students often graduate with the knowledge of at least twelve softwares.

A fertile crossover between formal/theoretical speculation and design work is visible throughout the GSAPP. Even the most basic techniques are taught in the wider context of architectural thinking. A wide range of graphic media is used to convey information ranging from simple programmatic diagrams to complex three-dimensional and four-dimensional presentation drawings. These are employed throughout the Design Studio Sequence and include inventive

model-making techniques. A range of progressively sophisticated and precise drawing techniques—orthogonal, axonometric and perspectival projections, development of surfaces, shading and sequenced animations, detail drawing as well as modeling and fabrication —are taught in **A4023 Architectural Drawing and Representation I** and **A4551 Architectural Drawing and Representation II**. All students are required to take **A4535 Computer Aided Design in Architecture**, which introduces all students to the concepts and utilization of computer technology in design and representation. Specialized courses are offered that are taught by leading graphic designers (for example, **A4716 Graphic Presentation I** and **A4717 Adv. Graphic Presentation II** taught by the graphic designer Michael Rock) which extend the study of visual representation to include graphic design in the built environment itself, having students use their designs from studio projects for the class assignments. Courses range from architectural photography and filmmaking to the latest techniques in digital modeling, mapping, rendering and animation, fabrication, scripting, and any combination of this range – scripting and environmental analysis, for example, or mapping and mobile technology and even spatially motivated smart phone application design..

A new major lecture course has recently been established (**A4326 Architectural Visualization: 1900 to 2000** by Reinhold Martin) to help the students understand the place of the plethora of these latest techniques of visual representation within the historical context of the evolution of techniques used by architects since the fifteenth century. Several of the **History/Theory** seminars involve the creation of a major graphic component, including Mark Wasiuta's **A4581 Exhibition Histories**, Janette Kim's **A6160 Known Unknowns**, which looked at risk management in terms of ecology, and Craig Buckley's seminar on the recent history of museums in **A4566 Collecting Architecture: Territories**. Students take advantage of a variety of state-of-the-art information technologies in the School's computer labs and studio spaces. Almost all studios make extensive use of the 2d and 3d output shop for drawings and models. Studios increasingly take advantage of the School's computer controlled fabrication lab to produce full-scale component prototypes directly from computer models. Computer drawings are extensively used in **Building Science and Technology** projects.

In addition, the ongoing series of exhibitions of architectural drawings in the GSAPP galleries is understood as a key pedagogical aid in helping the students to broaden their understanding of the diversity of graphic techniques available to the architect. Students can pursue issues of graphic communication further by engaging with the work of specialized labs in the school, pursuing, for example, advanced forms of mapping and data visualization in the Spatial Information Design Lab (SIDL), the Fabrication Lab, the Cloud Lab, the Urban Landscape Lab, the Living Lab, the Network Architecture lab or advanced forms of scripting in the Building Science Research Lab. Some workshops have been specifically funded such that student work has been exhibited in Milano (digital fabrication of furniture), at the Beijing Olympics (digitally fabricated costume design), on the Guggenheim Museum website, at the AIA Center for Architecture and also, increasingly at the end of year show at the GSAPP. These are often one-time workshops, which are linked to a specific professor, a specific lab, and a self selecting group of students. This is a variation of a design-build studio on the scale of the seminar and on the scale that an individual student or a team of students can accomplish.

A.4. Technical Documentation:

Ability to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

The required courses **A4111 Architectural Technology I, A4115 Architectural Technology V**, and **A4560 Professional Practice** demonstrate ability of this criterion.

Technical Documentation is introduced in **A4111 Architectural Technology I**. In this class, typically taken by students without a previous degree in Architecture, the final project involves a structure/façade design problem with documention with plans, sections, elevations, details, and calculations. In **A4115 Architectural Technology V**, as part of the comprehensive technical design problem, students will be required to produce a complete outline specification. As previously noted, in the **A4560 Professional Practice** course there are lengthy discussions about how to write specifications, CSI format, prescriptive vs. performance, sections of specifications and topics included, general vs. specific, how the technical sections of specifications fit into the project manual, and how correlation and intent work vs. relationship between specifications and working drawings.

In **A4023 Architectural Drawing and Representation I**, **A4535 Fundamentals of Digital Design**, **A4534 Advanced Computer-aided Design in Architecture**, and **A4511 Architectural Drawing and Representation and Representation II**, students are taught a variety of techniques for the precise description of three dimensional phenomena in two-dimensional images, three-dimensional models, and animation. The major assignment in the required digital design course is the digital modeling of the structural assembly of exemplary designs. In **A4114 Architectural Technology IV**, students spend six weeks using structural enclosure and environmental conditioning construction documents to analyze an existing building. In **A4115 Architectural Technology V**, students work for a semester to produce detailed three-dimensional and two dimensional schematic construction documentation of a multistory building of their own design and visual studies projects. The digital design environment is cultivating more precise drawings since the student's detailed physical models are increasingly being generated directly out of their computer drawings. The drawings have to very accurately define all elements of the building. The current evolution in architectural practice towards a continuity from original digital design work, modeling, and rendering through developed design, structural and environmental analysis, to working drawings, and computer milled fabrication within a single software environment, which is one of the major themes investigated at GSAPP, is increasing the level of precision in all drawings. **A4560 Professional Practice** includes in-depth discussion and examples of various aspects and purposes, construction and contractual, of working drawings and the "front end" and the technical sections of project manuals. The course discusses the differences between performance and prescriptive specifications, where each is more appropriate and how trends in new codes toward performance specs encourage more creative solutions to achieve desired results of safety. Emphasis is placed on how clear and thorough technical documents turn designs into buildings as intended, and reduce disputes and problems, **Visual Studies** workshops and **Building Technology** seminars dealing with fabrication and collaborative digital platforms (**A4141 Beyond Prototype, A4715 Re-thinking BIM, A4634 Advanced Curtain Walls, A4656 Fast Pace / Slow Space, A4781 Surface, Screen, and Structure, A4627 Materials and Methods in Architecture: Concrete Obsessions, A4730/1 Adaptive Formulations I and II)** , Independent Study projects, design-build studios (Galia

Solomonoff, **A4004 Core Studio IV "Temporary/Contemporary Pavilion"**) courses (**A4670 Design/Build: Design Sequence**, **A4798 Craft in the Digital Age, A4747 Parametric Realizations**) and workshops and the opportunity to work with the Laboratory for Applied Building Science offer students the means to develop even more precise working drawings.

A.5. Investigative Skills:
Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes

The required courses **A4001 Core Studio I** and **A4003 Core Studio II** demonstrate ability of this criterion.

Since GSAPP takes very seriously its active role in a research University, the basic mission of the School is to maintain a curriculum that elevates the research skills of all students. From the very first assignment in Core Studio I onwards, students are asked to gather information and carry out independent research as a key part of the design process. The **Advanced Design** studios are treated as a form of research in their own right built upon the basic expertise transmitted in the **Core Studio** curriculum. Likewise, **History/Theory/Technology** seminars are understood to provide both the necessary complement to the design part of the professional curriculum and a bridge towards specialized academic research as represented by the School's Ph.D. program and Masters in Critical, Curatorial and Conceptual Studies program. The School also works to maintain a significant amount of overlap, with analytical research going on in most studios and exploration of design in most lectures and seminars. Seminars taught by professional architects and studios taught by architects also trained as scholars establish this bridge between the kind of research typical of all University disciplines and the kind of design research specific to architecture. Even the basic structure of Avery Hall, with the Avery research library at the base supporting the design studios on the top floors, communicates this mission. Many of the School's scholars are active in studio teaching and design reviews. The underlying ethos is that every student is both a designer and a researcher and the highest standards are expected of both, with a demanding group of designers on one side and a demanding group of scholars on the other, and a significant bridge between established by those trained both in design and scholarship.

Research is inherent to all the design studios at the GSAPP. As an institution concerned with the contemporary aspects of the city, we are deeply committed to both design research and analysis as methods of expanding the possibilities for investigation within the field of architecture. The process of data collection and analysis associated with the design studios begins in the first semester, **A4001 Core Studio I**, when students identify conditions in the city in which architectural and infrastructure systems influence one another and each student is asked to research one aspect of environmental science to guide their design, represent the results of this investigation and show how it contributed to their design project. This process continues through the second semester **A4002 Core Studio II,** and the third semester Housing Studio, **A4003 Core Studio III**, deepens the research to include wider economic and social factors. An example of Investigative Skills are seen in **A4003 Core Studio III** where students are asked to study sites in terms of social and demographic data. For example: students often make use of census or economic data in seeking to better understand the make up of a neighborhood or local community. Information found in public resources is affects design goals as students seek to design for a constituency. In **A4004 Advanced Studio IV** the analysis is geared to questions of

applied design research particularly in relation to materials, building systems and environment. In the advanced studios, students are called upon to engage in increasingly complex investigations, often carrying out substantial collaborative research into particular issues alongside the design work. All the advanced studios are treated as a form of experimental research guided by the interests and expertise of the particular critic. Many of the advanced studios are actually key components of a major research initiative being carried out by the University. Students conducting research in advanced **History/Theory** seminars must have a practical awareness of the methods of historical inquiry, and the recent integration of research labs with studio, seminar classes, and workshops offers students additional opportunities to be active participants in the leading edge of advanced contemporary research.

A. 6. Fundamental Design Skills:
Ability to effectively use basic architectural and environmental principles in design.

The required courses **A4001 Core Studio I** and **A4002 Core Studio II** demonstrate ability of this criterion.

Half of the total credit hours in the M.Arch. curriculum are taken in the design studios, which act as the heart of the School through a calibrated sequence, as detailed above in the program overview narrative. The success of the final advanced studios depends on the rigor of the training in the Core studios where fundamental skills are addressed. The three-semester **Core Studio** sequence develops a capacity to work with skill and invention at all levels of architectural design. Studio methods of investigation vary with each of the design critics, but there is a common structure that establishes essential practices in design through a calibrated sequence of assignments that lead to a completed building proposal. The studios are structured in a way that supports an integrated approach to design; essential conditions of site, structure, building thermal envelope and program form the core questions of the first year studios, but these are tested against complex urban sites, and frequently in relation to sites that are in transition. Program has long been a driving consideration at Columbia, but it has not supplanted a focused investigation of fundamental building concerns. The final semester of the Core Studios addresses the design of a substantial housing project; earlier Core Studios design buildings on demanding sites for a clearly defined public program. Basic design skills are developed in the context of complex urban and social questions. In each step of the sequence, students are required to explore different scales of the project with focused tasks and continuous feedback.

The three-semester Core Studio sequence strives to develop a capacity to work with skill and invention at all levels of architectural design. Fundamental skills increasingly require that students and faculty explore the potentials of new building processes, new systems of manufacturing and construction, and new considerations of use and programming in relation to diverse urban constituencies. Given Columbia's location in New York City the city's increasingly global constituency as well as development pressures that arise in the city and due to globalization the core studios strive to address sites as both local and effectively global. The studios in this way try to address contemporary architectural practice and how an architect works in this changing and new context of industry, development and ultimately people.

Basic principles of space and form making are taught throughout the sequence of the Design Studios, beginning with **A4001 Core Studio I**. Concurrently, basic principles of structural

and constructional principles in relation to the development of interior space are taught in the **Building Science and Technology** Sequence.

A. 7. Use of Precedents:
Ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.

The required courses **A4002 Core Studio II** and **A4003 Core Studio III** demonstrate ability of this criterion.

The design research culture of GSAPP, based upon the remarkable collections in the Avery Library, simultaneously reaches forward towards the future of the architectural profession and backwards into the best practices of the past. Students are encouraged to see the two gestures as interlinked. In this way, it is logical that the School devoted to a forward evolution in architectural practice is also the one most devoted to the preservation of the great works of the past. The active participation of a large team of historians and thoughtful designers ensure that students learn of relevant strategies of the past that can play a new role in the future. Each and every class at the School is understood to engage thoughtfully with the question of precedent. In recent years, the old opposition between an architectural design program devoted to formal innovations and a historic preservation program devoted to preventing such changes has given way to a close partnership. This approach is most obvious in the joint architecture/preservation advanced design studio but permeates the wider school and is established in the early design studios. Even those designers carrying out the most advanced experimental work with digital form generation, representation, and fabrication are self-consciously embracing the historical precedents established by historical figures (Jean Prouve, Candela, Fuller, etc). The careful use of precedent is understood as a key way of both grounding a project into a particular site, tradition, or programmatic demand, and extending the discipline forward.

Precedents are used throughout the curriculum as methods for teaching. As a tool in design, they are used most thoroughly in **A4002 Core Studio II** with its attention to the contemporary evolution of a historical type (a bank) in the context of the historical morphology of a dense urban site and **A4003 Core Studio III** in the analysis of housing precedents as they relate to various policy initiatives in New York City, nationally and internationally and provide the context for evaluating the success of each student's design in terms of siting form, organization, and apartment layouts. In the **Building Science and Technology** sequence, students use precedent analysis in **A4114 Architectural Technology IV** to understand the relationship between the interaction of systems and the way they inform a building's form and expression through analysis of a key set of examples. In the **History/Theory** sequence and elective courses precedents are understood as a critical tool for evaluating meaning and relevancy. The required History/Theory lecture courses establish the precedent of modern architecture underlying much of contemporary urban environment, with other lecture classes tracing the precents back through history and forward throught the post-war period. In classes such as **A4229 Studies in Tectonic Culture** and **A6837 Evolution of Contemporary Urban Fabric** students use precedents to look at issues ranging in scale from a single tectonic unit to both building and urban scales. Advanced Studios (like the joint Architecture/Preservation studio **A4005 Advanced Studio V** and Enrique

Walker, The Dictionary of Received Ideas **A4006 Advanced Studio VI**) are devoted to the question of precedent and its role in contemporary design.

A. 8. Ordering Systems Skills:
Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

The required courses **A4001 Core Studio I, A4003 Core Studio III**, and **A4024 Architectural Drawing and Representation II** demonstrate understanding of this criterion.

Dedicated to an evolving diversity of approaches in its design culture, GSAPP strongly advocates understanding a diversity of principles governing formal design and visual perception and representation. At the heart of the architect's core skill set is the ability to thoughtfully use ordering systems to contribute programmatic, formal and structural organization to address key needs of the built environment, responsibly. GSAPP provides a base in fundamental techniques that is then opened up to an array of approaches that all in some way build upon that initial base. The school's size and the number of studios, seminars and workshops offered allow a wide variety of guiding principles in relation to form, ordering systems and methods of design both 2d and 3d, as well as the opportunity to pursue the study of any of these in further depth. Such work addresses important questions of form, composition, and structure, at a wide range of scales, in addition to making increasing use of new computing technologies and software to demonstrate systems of ordering, form, structure and scale, in relation to emerging methods of visualization and construction. The **Visual Studies** sector of the curriculum has been effective at using graphic and computation software to illuminate often invisible patterns and systems of social, political, ecological, biological, and technological life—giving form and visual order to factors that inform architectural design and intentions.

The **Core Studio** sequence gradually builds up the student's repertoire of compositional techniques to provide a rich palette of possible ordering approaches to any particular design project. The Core Studio III housing studio requires the students to develop and refine particular ordering systems on a large scale to distribute multiple unit housing arrays on the site and on a small scale to organize the interlocking of units and of spaces within units. Basics of two-dimensional organization are taught in **A4023 Architectural Drawing and Representation I**. Basic two and three-dimensional principles are further developed in **A4024 Architectural Drawing and Representation II.**

History/Theory classes present and explain the various ordering principles that have been used at different historic periods in great detail so that the students learn from the precedents and clearly articulate the methods and systems they are studying in seminars or applying in design studios. Examples include **A4229 Studies in Tectonic Culture**, **A4353 Le Corbusier, Theory and Analysis**, **A4605 Italian Renaissance Architecture**, **1400-1600** and **A6190 Rule vs Freedom. BuildingT echnology** classes, like **A4630 Torsion and Bearing: Theories of Structure,** analyze basic ordering systems in developing structural coherence. Visual studies electives increasingly focus on ordering systems, as in **A4649 Current Issues in Transformational and Surface Architecture**, **A4720 Meshing, A4711 Advanced Algorithmic Design, A4141 Beyond Prototype, A4730/1 Adaptive Formulations I and II.** A number of **Advanced Studios** likewise concentrate on experimental approaches to ordering systems, including studios focusing on type and on the relationship between biological and architectural

systems. The increased emphasis on landscape and the ecological environment throughout the school has also deepened the understanding of biological and geological systems and is directly enhancing design work.

A. 9. Historical Traditions and Global Culture:
Understanding of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.

The required courses **A4006 Advanced Studio VI, A4348 History of Architecture 1 1750 – 1850**, and **A4349 History of Architecture 11 1850 – 1930** demonstrate understanding of this criterion.

The school is uniquely committed to positioning architectural practice within the complexity and diversity of the global context. The core curriculum in History/Theory presents a complex analysis of the emergence of modern architecture as an international phenomenon with very different regional variations and impacts. Professor Frampton's **A4349 History of Architecture 1 1750-1930** establishes the conditions for his position of "critical regionalism" by which the dominant modes of international modernism are uniquely interpreted and inflected within different global contexts. In the **A4006 Advanced Studio VI** all students in the program travel to one of the cities where GSAPP has a Studio-X design research facility and engage directly with the divergent indigenous, contemporary and emergent conditions and practices in regions outside the United States and Western Europe (China, India, South Africa, Brazil, Jordan, Russia, Turkey). In each location, the program stresses a holistic approach involving all the multiple dimensions of the context. Additional studios travel in the fall semester. Seminar classes are devoted to the diverse global context of architectural practice (**A4517 Exotic Moderns: City, Space, and "Other" Modernities, A4529 Post-Colonial/Colonial Architecture**).

Specialized seminar classes address regional specificity, as in classes on traditional and contemporary architecture, (**A4460 Japanese Urbanism**, **A6390 Post-War Japanese Architecture**, **A4356 Contemporary Chinese City**, **A4789 Documenting Latin American Architecture**, **A4344 Traditional Japanese Architecture, A4949 Formalism and Informality in Latin American Architecture, A5464 Arab Cities in Evolution)**. Some of these seminars travel to the regions they study. Summer design workshops around the world offer students additional opportunities to engage in the diversity of contexts (Brazil, Jordan, Finland, Italy, China, India, etc). Research labs devoted to specific regions (China Megacities Lab, Global Africa Lab, Latin lab, Headquarters of Japanese Architecture) develop classes, events, workshops, studios and publications to broaden the school's understanding and engagement with diverse traditions and conditions in a global environment. The intense program of events at the school routinely brings experts from all over the world to expose key questions to a diversity of global perspectives or to focus on a particular region or the regionally specific work of a particular designer. Major events each year focus on specific regions, like the annual multi-day Ecogram symposium devoted to sustainability that has focused, for example, on Africa and China or the symposium devoted to the last decade of transformative urban design in Colombia in Latin America. With major research projects, such as the "Experiments in Motion" project, students become actively involved in comparative analysis between the built environments in different global cities. Almost all these forms of engagement with global diversity involve a cross

disciplinary approach both between the programs within the school and within and beyond the University. The Studio-X global network has been developed to provide the key infrastructural platform to support this continuous engagement with global culture and the major Center for Global Design and Development (CGDD) due to open in Fall 2013 will complete this infrastructure by providing a focal point for the global network and a base for cross-disciplinary work on global cities by experts from across the whole University. GSAPP is deeply committed to the view that an architectural school, and the figure of the professional architect, is in a unique position and has a unique responsibility to host the key holistic conversations about the future of the built environment.

A. 10. Cultural Diversity:
Understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.

The required courses **A4348 History of Architecture I 1750 – 1850** and **A4349 History of Architecture II 1850 – 1930** demonstrate understanding of this criterion.

The GSAPP culture understands the criteria of "cultural diversity" to be absolutely central to its educational philosophy, and student performance criteria **A. 9. Historical Traditions and Global Culture** is understood to be a subset of this wider value. The School is in every way committed to exploring the diversity of conditions facing the architect in our society and the diversity of approaches that can be taken. It tries to incubate an open, responsive and responsible approach to architecture rather than a particular form of architecture.

The GSAPP thus feels a special commitment to addressing issues of social responsibility in architecture. The often challenging and rapidly evolving social and physical realities of the urban environment, and the diverse backgrounds and individual commitments of the faculty and students have combined to create an atmosphere in which social issues figure prominently. Drawing on the resources of a faculty knowledgeable in many areas, these concerns are further pursued through lecture courses and seminars. A diverse and highly international student body is a primary resource and incentive for dialogue, as is the multicultural nature of New York City. Visiting design critics and scholars from around the world underline issues of cultural diversity and the central role of international travel for direct engagement in cultures beyond the student's normal experience, events devoted to global diversity and major research projects devoted to work in diverse cultures and comparative analysis creates a rich matrix for cultural sensitivity and the development of professional skills that assist the architect to assume a responsible and effective role in unique or multiple cultural contexts The **History/Theory** curriculum is structured throughout to achieve an awareness of architectural history in its diverse cultural context. The need for sensitivity and expertise in the face of diversity is most explicitly realized in the required Non-Western Architectural distribution category where course offerings include: **A4344 Traditional Japanese Architecture**, **A4460 Japanese Urbanism**, **A4517 Exotic Moderns: City, Space, and Other Modernities**, **A4638 Visions of the Japanese House**, and **A4690 East by East West: Modernity in Translation, A4949 Formalism and Informality in Latin American Architecture, A5464 Arab Cities in Evolution**. A number of seminars address issues of diversity and multiculturalism, including: **A4688 Public Space and Recombinant Urbanism**, and **A6769 History of the American City**.

The understanding of human diversity, and the architect's responsibility towards it, is also deepened by seminars addressing questions of ethics in architecture (like **A4780 Architecture, Human Rights, Spatial Politics** and or diversity within the United States (**A4642 Contested Grounds: The Spatial Politics of Memory/History**).) by conferences and symposia and a number of visiting lectures.. The school established the Percival and Naomi Goodman prize to support research by students in the area of social responsibility and a group of leading GSAPP faculty evaluate the proposals in detail to make this important award. The resulting work by the students is then exhibited in the school.

Due to the multicultural nature of cities, students must directly address issues of diversity in a design environment. A dialogue concerning how individuals and groups of differing gender, race, ethnic backgrounds and socioeconomic status respond to and affect their context is basic to the entire Design Studio Sequence. These issues are specifically addressed in the context of the housing studio, **A4003 Core Studio III.** The studio plans and designs housing that can fulfill the needs of diverse constituency groups. It addresses affordable housing through public/private partnerships as a model for re-distributions of population by race, income levels, class, etc.

Several of the new research labs, in particular the Spatial Information Design Lab with its expertise in the applied use of GIS mapping to dynamically visualize diversity in an urban or geographical setting, and the Social Technological Change Lab offer students opportunities to extend their understanding of the crucial issue of diversity in analyzing and designing the built environment. Many of the lectures, workshops and symposia are dedicated to the theme. Conferences like "Where is the Non-West?: Architectures of Globalization," and "What is Social Urbanism? Colombia at Columbia," for example, extend the school's thinking in this key area.

A.11. Applied Research:
Understanding of the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

The required courses **A4001 Core Studio I, A4004 Advanced Studio IV**, and **A4111 Architectural Technology I** demonstrate understanding of this criterion.

As stated above, applied research is a major part of the school's identity and a vital part of the curriculum. From the very first design studio, students are encouraged to see the architect as a professional with a high degree of expertise to address well formulated complex cultural and technical conditions but also having the ability to carry out original research. **A4001 Core Studio I** uses the program of an environmental research station in an urban seating and requires all students to investigate an area of scientific research in the environment and demonstrate how their project both enhances the study of this area but also how the ideas they have researched positively impacted their own design. This challenge sets the tone for the whole program where students are not only expected to clearly identify the way their thinking is embodied in their physical designs but also how that thinking should involve coordinated research that supports the design decisions. In the same semester, students are exposed to the scientific foundations of Architecture in **A111 Architectural Technology I**. In the final assignment, students much apply what they've learned in order to develop a façade system prototype at a 1:1 scale. Students have to do their own detailed material research, design the complete system, document it with plans, sections, elevations and details, and build a full scale portion of the wall section using real materials. In **A4004 Core Studio IV**, the studios are devoted to different dimensions of applied

research, particularly in materials, fabrication, software platforms, and building systems. This semester is a pivotal point of curricular transition from core to advanced. The C-BIP studio, for example, is devoted to researching new techniques of collaborative design using a CATIA software platform for designing environmental control elements to retrofit New York City housing stock.A high proportion of the advanced studios in the final two semesters are explicitly framed in terms of applied research. A number of the **Visual Studies** workshops are likewise devoted to applied research (like **A4378/9 Living Architecture 1 and 2, A4707 Digital Detailing/Complex Assembly, A4747 Parametric Realizations, A6120 Architectural Bio-synthesis: DNA, Buildings and Innovation in the Century of Biology, A4792 Approaching Convergence**).The set of cross disciplinary**,** research labs at the school focus applied research on key areas (fabrication, sustainability, landscape, networks, mapping, data visualization, technology transfer, etc), often through the support of research grants. Major research initiatives (The Columbia Building Intelligence Program (C-BIP), Experiments in Motion (EIM), the Advanced Data Visualization Project (ADVP), etc.) not only extend the school's wider contribution to applied research but directly impact the curriculum through studios with additional resources for travel, faculty, consultants, software, publications etc. Similarly, many of the faculty are individually involved in advanced applied research. The school's Laboratory of Applied Building Science and Conservation Lab hosts a substantial body of material investigations but studios increasingly visit major industrial research labs, for example in the glass and concrete industry.The emergence of such a rich applied research culture at the school reflects a strengthening of the school's core mission to remain at the intersection of training in current best practices and active research on the generation of the possible best practices of the future. Maintaining the deep commitment to leadership in history/theory research that defined the school since its founding, the school is increasingly engaged in engaged research into the real time conditions of rapidly evolving cities, the building industry and the profession.

Realm B: Integrated Building Practices, Technical Skills and Knowledge:

B. 1. Pre-Design:
Ability to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.

The required courses **A4002 Core Studio II, 44003 Core Studio III**, and **A4115 Architectural Technology V** demonstrate ability of this criterion.

This criterion has particular importance at the GSAPP—and has been implemented throughout the curriculum. Many studios ask the designer to invent, refine or transform a traditional program. In **A4001 Core Studio I**, students are introduced to highly structured ideas of program and site (focusing on a small university lab in an urban location) as a generator of architectural thought. The studio introduces students to the history of public space and zoning laws and in particular to issues of programming public space within a building that also requires controlled and private environments. **A4002 Core Studio II** continues the investigation of sites

New York City where the programming requires significant work to address multiple constituencies and stake holders. Students are asked to do a detailed analysis of the contemporary condition and history of the site, identifying difficulties and opportunities in terms of the required program, which is also studied in terms of historical precedents and evolving contemporary practices. As part of this pre-design analysis students are asked to individually add and defend new programmatic elements to enhance the given program (recently a community based bank) on the given site. A major part of the assignment is for students to develop and defend a new comprehensive program in the Pre Design phase. In **A4003 Core Studio III**, students take this design preparation further in developing a comprehensive understanding of program in the development of a housing project, by preparing an assessment of user needs and understanding spaces and equipment requirements and a detailed review of public policy and regulations applying to the site. Further knowledge of site is gained through a multi-layered analysis of site conditions. A review of the programming is examined in relationship to policy, financing, need, and demographics. Visiting experts from different consultant fields are invited to brief the students on the relevant regulations, site conditions, and local cultural issues that their designs will need to accommodate. Students are asked to explain their evolving and final design decsions in terms of this Pre-Design analysis and are encouraged to return to reconsider the analysis for further input at each phase. A number of the GSAPP faculty (including Bernard Tschumi, Kenneth Frampton, Gwendolyn Wright, and Reinhold Martin) have made major contributions to the discipline's understanding of the question of program and **Advanced Studios** often require students to develop their own program in response to a particular situation and in many studios, the pre-design phase is assembled into individual or collaborative reports. With around 18 Advanced Studios offered in each of the final two semesters, a wide array of different program types, programming issues, and philosophies of programming is offered each semester.
A4115 Architectural Technology V

B. 2. Accessibility:
Ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

The required courses **A4002 Core Studio II** and **A4003 Core Studio III** demonstrate ability of this criterion.

All students are expected to be aware of the needs and requirements of those with varying physical abilities. This criterion is addressed in **A4002 Core Studio II** and most directly in the housing studio **A4003 Core Studio III.** The studio syllabus for all students in their third semester specifically states, "Americans with Disabilities Act: every apartment should be accessible; at least two elevators are required. Designs that do meet this criteria are unacceptable." Students have a studio workshop early in the semester on how accessibility requirements apply to the particular site and program. ADA and other codes and regulations are discussed, with illustrations, in **A4560 Professional Practice,** together with how different governmental regulations relate to each other.

The criteria are also addressed in several of the **Advanced Studios**. Some of the faculty, like Michelle Fornabai with a studio with the program of "School for the Blind and Multiply-Disabled," Hilary Sample, who focuses on the questions of urban public heath and Mark Rakatansky focusing on the design of handrails etc, have made the issue a central focus of their

own professional and pedagogical work. The School has organized panels on public health and healthcare facility design. The Dean of GSAPP recently collaborated with the Dean of Public Health and the Dean of Engineering on a major presentation at Davos calling for the complete rethinking of urban and architectural design in the face of the rapid aging of global cities, and the School is launching a multi-year design research project on senior housing in which accessibility is one of the key elements.

B. 3. Sustainability:
Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.

The required courses **A4003 Core Studio III, A4112 Architectural Technology II**, and **A4115 Architectural Technology V** demonstrate ability of this criterion.

In recent years GSAPP has grown increasingly devoted to exploring the question of energy responsibility and intelligence. Studio projects, seminars, visiting lectures and conferences are devoted to it. A succession of Studios on themes like waste, water, landscape ecology, green architecture, etc. have developed considerable momentum and the hiring of the first full-time landscape architect with an expertise in ecology and an environmental engineer who works on sustainability design with a number of the world's most prominent architects has reinforced this refreshing trend. Research labs like the new Eco Lab, the Urban Landscape Lab and the Urban Design Lab (jointly run with the Earth Institute at Columbia) support the latest thinking about sustainability in the curriculum and extend thinking in the field. Several members of the school faculty are on the organizing faculty of the Earth Institute, and joint classes with the Earth Institute are offered by the school, like the EI – GSAPP forum course taught by Professor Kate Orff of GSAPP and Kate McFadden of the Earth Institute. Major multi-day symposia at the school like the multi-day "Ecogram" series, and the "Green Metropolis," "Waste Streams," and "Zero State – E3*NY(Energy + Economy + Ecology)" events offer a multi-disciplinary approach to the theme. The emphasis in the school is to see this question holistically not as a new and specialized concern of architects in the face of the uneven distribution of limited planetary resources but as a way of understanding the architect's traditional ability to offer designs that maximize efficiencies and synergies in an intelligent and life-affirming manor. Sustainability is therefore both a highly advanced technical focus but also a key dimension of best practices of the past.

For example, the preservation of built fabric, as supported by the Historic Preservation program and increasingly part of the design thinking in the architecture program, is understood as a matter of material and cultural sustainability, as is the question of public health, where the School is actively engaged in major initiatives to explore the relationships between the environment and health. As an urban institution, which has placed a high priority on the urban context, the environmental concerns at the GSAPP are strongly influenced by the University's location in the City of New York. The ecology of cities is a major concern of the program, where the built environment is understood to be a living part of the natural environment needing to be analyzed in the same terms as any other organic system. Awareness of basic principles is assumed from undergraduate training, and specific issues are taken up in the context of technology courses, design studios, and research labs. Awareness of environmental

responsibilities and the implications of building in a world of finite resources are implicitly recognized in the teaching of most classes at GSAPP. General principles of environmental context are discussed throughout. Physical environmental science, the architect's responsibility with respect to sustainability and other environmental issues are addressed in the required courses **A4111 Architectural Technology I** and **A4112 Architectural Technology II (taught by Nico Kienzl, the Director one of the world's premeire sustainability and environmental design firms)**. Sessions are are devoted to understanding a building's use of energy and impact on the environment, as well as the most advanced technologies and case studies for sustainable design. Influences on the renewability of the environment are considered in more depth in the electives **A4623 Sustainable Futures, A4684 Sustainable Design**, and **A4635 Architectural Daylighting**. Professor Davidson Norris, who teaches both of these classes is another leading expert in the field of sustainable design. Students at the School are very aware of sustainable design issues and practices, including the LEED Green Building Rating System of the U.S. Green Building Council.

In addition to a widespread use of ecological principles throughout the design studios, many of them specifically focus on the issue, some even making ecology part of the program itself to further emphasize the issue. The C-BIP studio in the fourth semester has environmental engineers as part of the faculty team and the designs of the 30 students are focused on ways of energy efficient rehabilitation of the New York City building stock to meet the 2030 environmental initiative of the city. Many of the **Advanced Studios** in the final two semesters likewise address sustainable design issues. Professors Laurie Hawkinson and Kate Orff, for example, have taught two advanced studios that focus on municipal solid waste and solutions to this growing problem. Professor Richard Plunz has taught several "Eco-Renewal" studios on the Gowanus Canal in Brooklyn and solutions to its environmental problems in collaboration with the School of Engineering (**A4005 Advanced Studio V "Green Gowanus: Maximum Exposure"** Richard Plunz and Patricia Culligen**).** The many such sustainability focused studios include **A4004 Advanced Studio IV** "**What Does Green Mean?"**Janette Kim, **A4005 Advanced Studio V Cancer Alley**" Kate Orff , **A4005 Advanced Studio V "Millennium City"** Markus Doschantshi. Seminars include **A4684 Sustainable Design**, **A4635 Architectural Daylighting**, **A4776 Infrastructure: Man, Machine, and the Industrial Landscape** and **A6160 Known-Unknowns: Architecture, Ecology, and Risk**. Visual Studies workshops classes include **A4753/7 Life / Support** and **A4787 Beyond the Outlet, taught by Amanda Parkes,** which explores new ideas in energy production and capture in personal and small scale systems. Independent Study projects and faculty research has also focused on the issue, as with David Benjamin and Soo-in Yang's projects on water quality monitoring devices and a related project involving an energy-harvesting door. A large proportion of the events, workshops and symposia are devoted to all aspects of this theme.

This area of the curriculum continues to grow in parallel with the increase in applied research. After faculty prioritized this area, GSAPP is completing a faculty search for a high level professional in the field of environmental engineering to lead both the technology courses within the Master of Architecture Program and the wider network of faculty devoted to issues of the environment and ecology, with special attention to the broader societal aspects of how energy consumption and its allocations affects citizens of all income groups and in varying political realms. This appointment will also be the founding director of the new Eco-Lab that has substantial start up funding for the first two years of research in this area. An environmental expert who works with the leading architects around the world will deepen the student and faculty links to the most advanced forms of energy modeling and design but also the new modes of

collaborative decision making in this key area. The school believes such expertise needs to be integrated at the very start of the design process and remain in all phases including all post-occupancy evaluations.

B. 4. Site Design:
Ability to respond to site characteristics such as soil, topography, vegetationi, and watershed in the development of a project design.

The required courses **A4001 Core Studio I** and **A4003 Core Studio III** demonstrate ability of this criterion.

Site is one of the major preoccupations of the School in all design studio teaching and history/theory courses. The issue of specific site characteristics, natural and imposed, is fundamental to the design exercises in **A400l Core Studio I** and **A4002 Core Studio II**, which ask students to make their building designs respond to a variety of challenging site contexts, focusing on highly demanding densely urban and waterside sites in Manhattan. Special attention to the nature of the urban site both in terms of local conditions and infrastructural connections is the focus in the housing studio **A4003 Core Studio III.** The pedagogical philosophy in all three core studios is to offer very demanding sites so that students cannot take any detail for granted and have to analyze the complex overly of interacting conditions and systems in which their designs will take meaning. Every project is understood as a responsible reaction to existing site conditions and a modification of those conditions that needs to be calibrated and explained.

The majority of the third-year Advanced Studios extend this approach by presenting students with complex sites (to which many studios travel) that demand nuanced analysis and responses. A number of the studios, such as Geoff Manaugh's **A4006 Advanced Studio VI** "Glacier, Island, Storm," Leslie Gill's **A4006 Advanced Studio VI** "UN on Ice: Claiming the Artic" make the question of site the central theme of the design. Studios like Laurie Hawkinson and Vishaan Chakrabarti's **A4005 Advanced Studio V** "The Speculation Studio" make the design of the site itself the central task of the studio.

The required **History/Theory** curriculum establishes the centrality of site and the architect's responsibility to the specificities of site in **A4349 History of Architecture II 1850 – 1930** with Kenneth Frampton's philosophy of Critical Regionalism. Classes like **A4480 Elements of Landscape Architecture** and **A4623 Landscape, Infrastructure, Intervention**, offer the opportunity to explore further questions of site and landscape design. Additionally, basic environmental criteria, including latitude, orientation, building shape and facade materials, the effect of nearby buildings, plants and bodies of water are covered in **A4112 Architectural Technology II.** The development of GIS courses and workshops, along with the Spatial Information Design Lab and Landscape Lab actively involved in studio classes, has greatly strengthened the students' ability to carry out exhaustive analysis of all dimensions of site.

The traditional importance of the question of site has been intensified with the increased commitment to constructability and sustainability at the School. Professor Kate Orff's role is key as the first landscape architect to be a member of the full-time faculty and coordinate efforts in this area, with her own designs, exhibitions and publications acting as a key source of inspiration to students. She represents a movement to develop infrastructure amenable rather than adverse to nature and leads studios that brings issues of the city's ecology to the forefront and seeks to

interweave them with the built environment—making urbanization and the environment less at odds and more mutually sustaining.

The research labs again offer students the opportunity to take the investigation of site underpinning all studio projects to the greatest possible depth, with the labs engaged in research projects, studios, lectures, symposia, exhibitions and publications. As, for example, when the Urban Landscape Research Lab directed by Professor Kate Orff working in partnership with the Spatial Information Design Lab, and the School carried out a study of the Gateway National Park and design competition in collaboration with the National Park's Conservancy, or the Spatial Information Design Lab's block by block analysis of the architectural impact of recent trends in the prison system and the associated **A4006 Advanced Studio VI** on the "Million Dollar Block" theory. The new Eco-Lab takes a holistic approach to all elements of the environment, with site being a key factor in its synthetic research. Major exhibition projects, like Urban Safari project of the Urban Landscape Lab that carried out a detailed analysis of dense metropolitan sites in New York City and Beijing in terms of plant and animal life allow for a more complex understanding of site.

B. 5. Life Safety:
Ability to apply the basic principles of life-safety systems with an emphasis on egress.

The required courses **A4115 Architectural Technology V** and **A4003 Core Studio III** demonstrate ability of this criterion.

All students are expected to be aware of the basic principles of design and selection of life safety systems. Life safety systems are introduced in **A4112 Architectural Technology II through lectures and precedent studies. In A4115 Architectural Technology V, these systems are applied to a full building design problem**. Codes and regulations are also outlined in **A4560 Professional Practice**, particularly regarding aspects of egress, construction classifications, and limitations based on uses, fire suppression systems and construction types. Sections of the current International Building Code are utilized for study examples. The issue is also addressed in the housing studio **A4003 Core Studio III**. A visiting consultant does a workshop early in the semester to go through the life-safety requirements related to such large scale housing projects and the particular site, local regulations etc that the students need to be attentive to.

The issue gained a wider role in the School with the extensive discussion post 9/11 regulations and attitudes towards egress distance and time, fire suppression etc. As the School has become increasingly dedicated to the architect's role in disaster relief, life safety has become an important criterion in the evaluation of student work. In Laurie Hawkinson's **A4005 Advanced Studio VI** on new housing prototypes for New Orleans and Alice Chun's **A4004 Advanced Studio IV** on new design prototypes for post-earthquake Haiti and post-tsunami studio and seminar work in Japan by professors Kunio Kudo, Toru Hasegawa, and Lynne Breslin, the questions of life safety became a central issue in student projects. Design charettes, exhibitions like "Japan: Disaster and Recovery" by the Japan Lab and symposia on post emergency design like the Latin Lab event on "After Catastrophe / Before Design: Rebuilding Haiti after the Earthquake" and the "When do cities recover from disaster?" conference foreground the issue. Guest speakers during the major materials conferences address the state-of-the-art techniques in the engineering analysis of fire movement and control and appropriate design strategies.

B. 6. Comprehensive Design:
Ability to produce a comprehensive architectural project that demonstrates each student's capacity to make design decisions across scales while integrating the following SPC:
A.2. Design Thinking Skills
A.4. Technical Documentation
A.5. Investigative Skills
A.8. Ordering Systems
A.9. Historical Traditions and Global Culture
B.2. Accessibility
B.3. Sustainability
B.4. Site Design
B.5. Life Safety
B.8. Environmental Systems
B.9. Structural Systems

The required courses **A4003 Core Studio III** and **A4115 Architectural Technology V** demonstrate ability of this criterion.

The ability to synthesize information in a comprehensive design is addressed in two ways at the GSAPP. The Design Studios address complex programs and technical issues to develop strength in combining programmatic and technical understanding along with spatial imagination. At the same time, in reverse, **Building Science and Technology** courses make use of reduced design programs and complex technical understandings to develop strength in the design of standard and innovative technical ideas. Through this combined methodology, the GSAPP believes that it teaches both these issues at a higher level than is possible by other means. Throughout the **Design Studio Sequence** students are expected to formulate and articulate effective architectural judgments on all dimensions of buildings as an integral part of their design education. These judgments are meant to apply to each and every interlocking element and aspect of the student's design from the smallest detail to the overall organization. These issues therefore form the core of jury discussions at all levels, and ever more explicitly in the **Advanced Studios** as the students progress in their sophistication and ability to holistically address all these concerns.A4003 Core Studio III is treated as the hinge point in this comprehensive approach and the enhanced curriculum outlined below seeks to take this deep integration to a new level.

The integration of technical content in architectural judgments and their assessment in relation to a completed project is explicitly undertaken in a six-week building analysis problem in **A4114 Architectural Technology IV**. The ability to use this information in a synthetic way is then demonstrated in a semester long technical building design problem in **A4115 Architectural Technology V** which calls for teams of four students to develop a comprehensive design, analysis, and documentation of the building. In collaboration with a teaching team of architects, structural engineers, and mechanical consultants, students design and develop and calculate a building structure, integrate façade, mechanical, life safety, and all critical systems in a fully detailed and calculated building solution. This is presented in a required set of scaled drawings of plan, section, elevation, and details, as well as 3D projections, systems diagrams, assembly diagrams, visualizations, models, and renderings.

While some Advanced Studios will zoom in on a very precisely defined and limited architectural issue, they are expected to do so in a comprehensive manner, and a proportion of their work is expected to clearly establish the wider technical, economic, and conceptual context. Other studios will take on problems that are wider than those normally tackled by a professional architect, but there is again the expectation that there will be a proportion of detailed resolution at smaller scales. Such a variety of approaches is an absolutely crucial part of GSAPP's core mission. As all students gradually transition from required core to advanced electives, GSAPP aims itself at the overall holistic growth of their abilities as a creative and responsible professional rather than distinct individual skill sets. Comprehensive design is the overall target of the M.Arch. program rather than a step along the way.

In addition, the new program of full scale construction projects, including the completed Art History Department slide library, the joint **A4004 Advanced Studio IV** with the School of the Arts to "investigate, design, document, design and build" a pavilion, the design-build seminar on the Urban Planning studio/seminar space, the wall systems for the Real Estate Development Studio and for the new Center for Global Design and Development has given students the chance to use their design skills and require a comprehensive understanding of structural and code issues in the creation of a functioning part of the campus architecture.

With the ever increasing integration of all technological issues within the wider curriculum the faculty is now taking this integration one step further. A new level of merging of the studio sequence and the technology sequence has been introduced this year. A selection of the best housing studio projects from the third semester A4003 Core Studio III will now be used as the basis for a more detailed set of technical drawings in the fourth semester (in place of the industrial loft building used in previous years). Faculty experts in environmental control, structural design, life safety, accessibility, and infrastructure make studio workshop presentations at the beginning of the housing studio, indicating which are the key technical demands in their area on the given site and with the large scale housing program. The design projects in the Fall need to integrate these issues at least schematically and the specialized technical faculty will be available during the semester for consultation. Projects that best integrate excellence in design and this set of technical demands will be selected for the spring semester **A4115 Architectural Technology V** where the same technology experts will guide teams of four students that will each have to develop a set of technical drawings that refine and define the particular technical solutions in each of these areas. Members of the design faculty from the Fall will offer feedback on the evolution of the designs midway through the Spring. Consultants are thereby understood as active collaborators throughout the design process and technical issues are understood not only as responsibilities of the architect but as opportunities to enhance the quality of design. This merging of the design and technology sequences during the third and fourth semesters at the exact midpoint of the overall curriculum reinforces the school's overall philosophy of design as a collaborative, comprehensive synthesis of a diversity of social, cultural, technical, and aesthetic factors that aims to produce a holistic contribution to major issues facing society.

B. 7. Financial Considerations:

Understanding of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.

The required course **A4560 Professional Practice** demonstrates understanding of this criterion.

Cost estimation is included in **A4560 Professional Practice**, and is discussed in terms of different methods of estimating, who is responsible in each phase, who can appropriately perform the services for different types of projects, and the architect's responsibilities to the client. Cost control issues are also integrated into the lectures of **A4114 Architectural Technology IV** and **A4115 Architectural Technology V**. Students do cost take-off measurements and quantity counts, develop rough cost estimates based on historic and localized sets for comparing regional cost implications, research alternative value-engineering schemes, and produce a report outlining the economic viability of the studio proposal. An experienced professional from the local construction industry now gives a guest lecture in financial analysis to the **A4115 Architectural Technology V** students which becomes the basis for design decisions throughout the semester. Project financing is discussed regarding lending sources and interim and permanent financing. Value Engineering is covered briefly in **A4111 Architectural Technology I**, and life cycle cost analysis is covered briefly in **A4112 Architectural Technology I**I. Students may take **A4312 Real Estate Finance I** as an elective to gain further information with regard to the economics of building.

The implications of public/private partnerships for housing development are studied in the **A4003 Core Studio III**. The studio looks at both the social and economic issues surrounding this kind of partnership and their implications for the provision of high quality social housing. Gwendolyn Wright's seminar course on housing **A4598 Modern Housing,** David Wallance's **A4788 Modular Architecture** and the joint Case Study studio between the Architecture and Real Estate Development programs **A4005 Advanced Studio V** offer students the opportunity to extend their understanding of cost control with in-depth studies of real world case studies. M.Arch students are increasingly taking classes in the Real Estate Development program and vice versa**.** The strengthening of ties between Real Estate Development students looking to support high quality architecture and Architecture students looking to be knowledgeable about the financial structures in the evolution of the built environment, along with the reinforced commitment to efficient construction through more sustainable practices, has greatly heightened the students' sensitivity to the question of cost control. In asking some guest lecturers to concentrate on a detailed account of one particular project and the precise steps in the exchanges with clients, the question of cost control is increasingly becoming part of the widest level of discussion and analysis in the School. The increased attention to sustainability has shifted the overall framework to life cycle costs both at the scale of individual. Much of the school's work on material science, building systems fabrication, collaborative software platforms, and sustainability is focused on an understanding of the financial efficiencies that can allow architects to assume greater control of their role and their designs in the face of clients, consultants, regulators, fabricators, and constructors. The C-BIP **A4004 Advanced Studio IV**, for example, is devoted to locating new efficiencies and new levels of precision in material specification, estimation, and reduced construction, operating, and maintainence costs. Research projects and events at the School increasing explore the role of BIM, and new design analysis fabrication and construction technologies in improving cost control from design through to realization. The ability for architects to actively participate in guiding efficiiences and monitoring results in real-time budgets is emphasized repeatedly. The increasing number of design-build projects literally place students at the heart of this issue. The school is proud of the graduates who have been able to use this knowledge to uniquely position and strengthen their professional practices.

B. 8. Environmental Systems:
Understanding the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.

The required courses **A4112 Architectural Technology II** and **A4115 Architectural Technology V** demonstrate understanding of this criterion.

These subjects are first covered in the **A4112 Architectural Technology II** including lectures on air distribution, covering such topics as ventilation losses, solar heat gain, indoor air quality concerns, etc. Their application and architectural implications are further developed in **A4114 Architectural Technology IV** and **A4115 Architectural Technology V** with the systems analysis problem and the comprehensive design problem. Further study is offered in the elective courses **A4634 Advanced Curtain Walls**, **A4635 Architectural Daylighting**, **A4684 Sustainable Desig**n (taught by world expert, Davidson Norris), **A6170 Architecture and the Environment, A4707 Digital Detailing: Simulation and Analysis**, and **A4628 Acoustics** (taught by Raj Patel, one of the worlds renowned acoustical design experts)**.**

Environmental systems are playing an increasingly important role in the school with the rise of concern for sustainability and integrated building systems. The C-BIP studio project in the fourth semester **A4004 Advanced Studio IV**, for example, is devoted to the design and deployment of environmental systems and the series of associated C-BIP think-tanks have expanded this knowledge, focusing for example, on the latest use of multi-dimensional software packages to analyze the environmental impact of design decisions in terms of orientation, materials, systems etc. The new Eco-Lab has been established in association with a new faculty appointment in environmental engineering to take this approach to another level by making environmental engineering a core asset brought to bear on the core curriculum, advanced studios and electives and the highest level of research by supporting Ph.D students joint with the School of Engineering and post-docs. Many of the events and exhibitions, like "Daylight and Architecture," and "Simulation in Architecture and Ecology," extend the school's thinking in this key area.

B. 9. Structural Systems:
Understanding of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.

The required courses **A4113 Architectural Technology III, A4115 Architectural Technology V**, and **A4114 Architectural Technology IV** demonstrate understanding of this criterion.

Structural analysis and design problems are presented throughout the structures-related portions of the **Building Science and Technology** sequence. Students completing the required sequence possess the ability to organize and design basic structural systems. **A4111 Architectural Technology I** introduces the concepts, vocabulary and tools of graphical and numerical analysis. **A4113 Architectural Technology III** continues developing students' understanding of structural design through calculation and computation. Demonstration labs illustrate the structural behavior of reinforced concrete, steel and wood. Advanced laboratories illustrate the action of building-scale beams and columns made up out of these materials. In

A4114 Architectural Technology IV, complete structural systems for entire buildings are taught in detail. Students are asked to analyze and design shear-wall, wind truss, moment frame and bearing wall systems to demonstrate their understanding. **A4115 Architectural Technology V** is devoted to the design of a multi-story industrial loft building. Structural, as well as envelope and environmental control systems, are detailed and sometimes numerically sized.

Issues of structure have increasingly been incorporated into the teaching of studio as well. The large number of practicing architects in the school has allowed the school to encourage technical exploration in studio work at all levels.The exploration is most specific in **A4002 Core Studio II**, with teams of structural engineers offering specific feedback on student projects. Many of the **Advanced Studios** carry out more detailed investigations of structural systems. For example, Jeffrey Inaba's **A4006 Advanced Studio VI**, ("Structure and Form") explored the relationship between structure and form, typically seen as binary, in order to tease out design strategies which "activate the structure as a central formal feature that conditions the architectural experience". David Benjamin's **A4006 Advanced Studio VI "Proof 6"** used new softwares to test alternative skyscraper structures under competing performance criteria. Michael Bell's **A4006 Advanced Studio VI**, ("MDS: Materials Based Design Studio – New Structural, Thermal, Spatial Design in Concrete") brought together a joint team of engineers and architects, with the support of Lafarge Research and Development labs, to explore with students, new structural and thermal aspects of concrete. Electives like Zak Kostura's **A4118 Exalted Structure** and David Wallance's**A4788 Modular Architecture: Strategy / Technology / Design** offer students opportunities to extend their understandiing. Design-Build electives such as "Design/Build" taught by Bob Marino and Mark Taylor carry out a rigorous practical analysis of materials and structure, in this case, with a complete renovation of approximately 1500 sf of Fayerweather Hall, to be used by the Urban Planning students and faculty. Workshops like those of Brigette Borders and research projects based in the Laboratory for Applied Building Science, like the Finland Workshop, and the "Bling Wall" in the newly renovated Real Estate Development center, give the students the opportunity to participate in the latest developments in fabrication. The faculty is largely comprised of industry leaders such as BoB Heigtes and Directors and Principals of the world's leading engineering firms, including ARUP, Buro Happold, Atelier 10, Thorton Tomasetti, LERA, and Silman. Professor Patricia Cullingham from Engineering in the joint studios taught with Richard Plunz and Laurie Hawkinson elevating the precision and creativity of student work.

Exhibitions (like the recent exhibition *Félix Candela: 1910–2010*), debates and conferences (like the major materials conferences on Glass, Concrete, Metal and Plastic, and lectures on or by structural engineers like Craig Schwitter, Christian Meyer, Albrecht Burmeister, Guy Nordenson, Paulo Monteiro, Hans Schober, and Werner Sobek) allow students to deepen their understanding of structural issues. A prestigious IGERT grant from the National Science Foundation award to the School of Architecture and the School of Engineering supports Ph.D, work by students whose research lies between architectural and engineering.

B. 10. Building Envelope Systems:

Understanding of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

The required courses **A4111 Architectural Technology I, A4112 Architectural Technology II**, and **A4115 Architectural Technology V** demonstrate understanding of this criterion.

One of the first courses of the required Building Science and Technology curriculum, **A4111 Architectural Technology I**, includes an in-depth study of several building envelope types culminating with a façade design problem. Together with **A4112 Architectural Technology II**, the course imparts an understanding of the principles that inform the design of the building envelope system. These courses cover building envelope, environmental control and information systems. Technical concepts, vocabulary, analysis and design tools are stressed.

4115 Architectural Technology V combines building envelope design with whole building design. In addition, more advanced students are able to take the electives **A4624 Advanced curtain walls, A4781 Surface, Screen, and Structure,** and **A4635 Architectural daylighting**.

In addition, **History/Theory** offerings study building envelope systems, such as **A4429 Studies in Tectonic Culture**. GSAPP has one of the world's leading designers of curtain walls on the faculty, Robert Heintges, and also Davidson Norris a partner of the renowned office of Carpenter Norris consulting. A number of the senior faculty (like Laurie Hawkinson and Bernard Tschumi) are known for their innovative work with envelopes and some of the key faculty (for example Phillip Anzalone) are known for their expertise in this area. A number of the **Advanced Studios** (such as Thomas Leeser's **A4005 Advanced Studio V "CLIMA[x] Extreme Environments"** which explored the performative limits of the architectural envelope in various extreme scenarios) ,**Visual Studies** (for example, **A4378 Living Architecture and A4781 Surface, Screen, and Structure**) and Fabrication Workshops offer the students opportunities for extending their understanding of building envelope systems by exploring new directions in responsive envelopes, while public lectures, for example on "Intelligent Facades," ensure that faculty and students are alert to the evolving state of the art in the area. Much of the fabrication research in the school has involved envelope systems and over the last 5 years, the school has developed a strong research partnership with Oldcastle Building Envelope to extend its thinking in this area. The series of C-BIP think tanks have focused industry leaders on the question of the building envelope.

B. 11. Building Service Systems:
Understanding of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems.

The required course **A4115 Architectural Technology V** demonstrates understanding of this criterion.

Vertical transportation, communication, security, fire protection systems, and the other issues are covered in **A4114 Architectural Technology IV** and **A4115 Architectural Technology V**. Fire Protection is also covered in **A4112 Architectural Technology II generally, concepts and systems are introduced in AT1, AT2, and AT3, then analyzed in a building in AT4, and applied in a design problem in AT5**. Elective such as **A6170 Architecture and the Environment** and **A4788 Modular Architecture: Strategy / Technology / Design** offer students opportunities to extend their understanding. As with Life Safety issues, the general awareness of the key role of building service systems has heightened throughout the School with its strong turn towards constructability and real-world involvement in disaster relief, post-disaster regulations,

and full scale construction projects. These issues are now playing a role in the discussion of post 9/11 security issues and in **History/Theory** classes (as in Reinhold Martin's analysis of the mechanics of the postwar office building) and increasingly in studio classes. The knowledge exchange has been deepened in the series of major conferences on building materials and the C-BIP think tanks which devote a lot of their focus to this key dimension of architectural practice.

B. 12. Building Materials and Assemblies:
Understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

The required courses **A4111 Architectural Technology I** and **A4115 Architectural Technology V** demonstrate understanding of this criterion.

These factors are addressed throughout the **Building Science and Technology** sequence in lectures, and technical design and analysis projects. In AT1, lectures on performative assemblies and materials are followed by a façade design problem. In AT5, students apply the work from the Architecture Techology sequence to a design that emphasizes the use of materials and assemblies in a solution that is both realistic and true to the design goals. They are especially pertinent to **A4112 Architectural Technology II**, **A4113 Architectural Technology III**, **A4114 Architectural Technology IV**, and **A4115 Architectural Technology V**. **Visual Studies** and fabrication workshops (**A4141 Beyond Prototype**, **A4629 Materials and Methods in Architecture: Concrete Obsessions, A4748 Special Topics in Fabrication – Formworks, A4656 Fast Pace, Slow Space)** deal with fabrication of structural members and component assemblies, while Joseph Vidich's **A4781 Surface, Screen and Structure** class develops a parametric architectural façade assembly. This increasing commitment to material and assembly can be seen in Independent Study projects, such as this last year's Polymorphic Project by a group of 6 Third Year students which designed playful and adaptive stanchion stools fabricated from silicone and fabric-cast concrete. The issues of building materials and assemblies are also the subjects of many **Advanced Studios**. Professor Steven Holl, for example, has focused studios on issues of material, beginning his studios with full scale detail assemblies where material is the driving factor. Professor Holl has offered several studios where material issues are coupled in experimental ways with multidisciplinary materials from art, and in particular from music. Likewise, Michael Bell has taught studios concentrating on the use of concrete in which students traveled to the laboratories of a leading concrete manufacturer to study the latest techniques. Bernard Tschumi's **A4006 Advanced Studio V "Concept and Material"** studio explored various materials and their relation to the production of concepts The School has increasingly found its studios offering addressing issues of building materials and assemblies in light of new computer aided production techniques; and a number of the studios stand out for their promise in realizing these new potentials. These include studios led, for example, by Professors Yoshiko Sato, Francois Roche, David Benjamin, and LiseAnne Couture. A series of Advanced Studios offer opportunities for students to explore new types of material systems, like Professor Michelle Fornabai's series of studios examining Soft Structures and Professor Yoshiko Sato's studios on space architecture in collaboration with NASA. The new program of full-scale construction projects in joint studios, design build seminars, visual studies workshops, and summer workshops again offers students an opportunity to extend their understanding through

real-world experience with materials and assemblies. Public events, feature architects, engineers and historians discussing the directions and implications of contemporary work in this area.

Recently, specific teachers have been hired because of their focus on materials and assemblies. Lecturers have been invited because of their expertise in materials and assembly techniques. Also, the major conferences on building materials have played a central role in the school's core mission. Each of these events has had a major impact on the wider curriculum and on advanced research The Laboratory for Applied Building Science has taken assembly to be its main question for investigation. The many students who are working in this lab are extending their understanding of assembly through physical experimentation.

Realm C: Leadership and Practice:

C. 1. Collaboration:
Ability to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

The required courses **A4003 Core Studio III, A4114 Architectural Technology IV**, and **A4115 Architectural Technology V** demonstrate ability of this criterion.

Collaboration has long been a hallmark of studio culture at GSAPP. Students are required to collaborate as part of the basic curriculum, most notably when they work in teams in the Housing Studio **A4003 Core Studio III**. Teams of four students collaborate in the fourth semester, **A4115 Architectural Technology V** to carry out the technical drawings of student design projects selected from the A4003 Core Studio III in the third semester (and did so previously with an industrial loft building). The **Building Science and Technology** sequence requires collaboration for much of its curriculum. **A4111 Architectural Technology I** and **A4112 Architectural Technology II** require groups of three to four students to design and analyze elements associated with the conditioning of inhabited space and the design of a facade assembly. The same structure is used for **A4114 Architectural Technology IV** in an analysis of a major American architectural work and in **A4115 Architectural Technology V** in the design of an industrial eight-story loft building, and now the design of a large scale housing project carrying over from **A4003 Core Studio III**.

In addition, the new range of interdisciplinary **Advanced Studios** with Preservation, Urban Planning, Real Estate Development, and Engineering again call for collaborative work between different forms of expertise. Many Advanced Studios involve collaboration among students. The C-BIP studio in the fourth semester constitutes a major pedagogical experiment in collaborative design with all the ideas generated by all 30 students being made available for use by all the other students, as is the archive of the design ideas developed by the students who did the studio in the previous years. This highly successful experiment over the last three years is now being used as a model for teaching in other parts of the curriculum, starting with **A4005 Advanced Studio V**. Galia Solomonoff's "Pavilion Studio" in collaboration with artist Liam Gillick and his group of Art students from Columbia University's Graduate School of Art, placed architecture students in direct collaboration with artists. The studio focused on the critical investigation of the role of design in the public realm where art and architecture inform and question each other.

Collaboration is a fundamental part of much of the education at the GSAPP with much teamwork required outside the design studio. In the required computer design class **A4534 Fundamentals of Digital Design** and a number of the **Visual Studies** workshops, students work in teams. Likewise, a number of the **History/Theory** seminars, which require visual analysis, also require students to work collaboratively.

Elective clases like **A4783 Workflow: Designing Industry** enable students to build on this understanding and study the latest potentials for collaborative work in practice. Juan Herreros' course **A6180 Architectural Practice as Project** brought groups of students together to develop new models for architectural practice.

The public events at the School frequently feature more than one member from design teams, and a wide array of consultants (structural, environmental, landscape, lighting, etc). The symposia, thank-tanks and workshops stress the dense web of collaborating consultants and industries involved in even smaller projects. The new working patterns of design teams in the global context is a frequent subject of presentations, debates, and symposia like the recent "How Do We Innovate and Collaborate Today?" that brought together professionals and academics to explore the new conditions of collaborative practice in detail.

Additional opportunities for collaborative work are provided when students become involved with the research labs, and usually find themselves working in an interdisciplinary team. As noted elsewhere in the APR, GSAPP continually fosters the sense of the architect at the heart of a collaborative design team coordinating a wide range of experts.

C. 2. Human Behavior:
Understanding of the relationship between human behavior, the natural environment and the design of the built environment.

The required courses **A4348 History of Architecture I: 1750 – 1850** and **A4349 History of Architecture II: 1850 – 1930** demonstrate understanding of this criterion.

Human behavior is a central part of the program and the inevitable consequence of the above goals. The core for this objective is established at the heart of the **History/Theory** curriculum. Mary Mcleod's **A4348 History of Architecture 1: 1750-1850** concentrates on understanding the social-cultural impacts that super-structural forces have upon the design of various historical typologies and Kenneth Frampton's **A4349 History of Architecture II: 1850-1930** concentrates on the real effects of industrialization on human behavior and social interaction. Architectural History at the GSAPP is taught as a form of social and intellectual history where these values are addressed throughout the History/Theory sequence. Examples of elective classes that extend understanding in this area through a specific emphasis on human behavior are **A4770 Neo-Conceptual: Art, Politics, and Architecture**, **A4648 Beyond Beauty: The Sublime and the Picturesque**, **A4038 C-Lab Seminar: New Maps for Aging Cities**, **A4515 Network Culture**, and **A4722 Network City**.

Similar emphasis can be found within the design studio sequence. Considerations of human behavior are likewise fundamental to work throughout the Design Studio Sequence. First year studios, **A4001 Core Studio I**, have made interactivity of use and form a primary force in the design process. Awareness of these issues is also part of the Housing Studio in **A4003 Core Studio III**. The Housing Studio has been reorganized to look at the dynamics of diverse socioeconomic groups occupying the same territory, with particular attention to the division

between public, communal and domestic spaces. A number of teachers in the **Core Studios** (Hilary Sample, Karla Rothstein and Mark Rakatansky, etc) base their work and teaching on this theme. Karla Rothstein' housing studios, for example, began with an analysis of domestic rituals—students use photographic techniques combined with building plans and diagramming. Human behavior and the use of space at the GSAPP are often studied in relation to programming, and in particular there has been a strong attempt to look at programming in relation to social transactions. There has also been an evolving direction at the school to look at building use and user needs prior to formal or structural needs. As an example: studios frequently have investigated programming, and use as well as the complex interaction of diverse user groups as a means to give more value to human needs and to acknowledge diverse users.

In the **Advanced Studios,** collaborations with experts in sociology, urban planning processes and community activism enrich the understanding of human behavior. Studios also focus on particular dimensions of behavior. Professor Michelle Fornabai's **A4004 Advanced Studio IV** "Emergent Technologies and Sensory Architectures," for example, explores the crucial dimension of touch at the interface between human and building. The recent "Foreclosed" exhibition at the Museum of Modern Art exemplifies this commitment to social responsibility. Organized by the school's Buell Center for the Study of American Architecture in collaboration with the museum, the exhibition featured the work of a number of designers on the faculty and addressed the social and physical consequences of the recent financial c ollapse. Based on deep multi-disciplinary analysis of the housing sector, published as a major report, the collaborative teams generated a set of new housing typologies. Students played an active role in the project through seminars, advanced studios (Reinhold Martin's **A4006 Advanced Studio VI** "Form-based Code") and through participation in the research team. Over the course of three years, the school hosted debates, panels, lectures, and workshops on the theme.

Many seminars also focus on human behavior. **A4378 Living Architecture**, led by David Benjamin and Soo-in Yang, for example, directly engages questions of interactive technologies that establish new relationships between human behavior and the building envelope. This seminar looks at both full scale architectural scale design, but also at the design of items and instruments that are part of building use. The Living Architecture Lab creates additional opportunities for students to work on human/environment interactivity. Likewise The Spatial Information Lab creates additional opportunities in its use of data mining techniques and social media to monitor and map patterns of human behavior at the urban scale. Exhibitions like "Buzz" and "Devices of perception," for example, extend the thinking about the human interaction with the environment at urban and building scales.

C. 3 Client Role in Architecture:
Understanding of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.

The required course **A4560 Professional Practice** demonstrates understanding of this criterion.

In Professor Paul Segal's **A4560 Professional Practice**, there is discussion about the various parties in the design and building process, including the commonality or separation of the client, owner and user. In covering architects' services, programming, both quantitative and qualitative, is covered, as well as the broader issues of understanding, and achieving consensus and reconciliation of the client's, owner's and user's sometimes disparate (and even opposing)

needs, desires and goals with those of the community and society. This topic is also covered in the textbook, *Professional Practice: A Guide to Turning Designs into Buildings* (W.W. Norton, 2006) by Professor Segal, which is a required text for the course at the School and at many other schools throughout the country. With the increasing engagement of faculty and students in on-site real world design problems, clients are increasingly part of the studio pedagogy, playing a role throughout the semester, from consultation at the beginning of the semester through to sitting on the final review. The rise of sponsored research has also brought clients, as individuals or private and public institutions, government or city bodies, into closer contact with the students' education. For example, Sarah William's Visual Studies course **A4546 Cell City** exposed students to the challenges of representing and extracting knowledge from large amounts of data provided from one of the largest telephone companies in the world, Telephonica. Williams also taught another course, **A6233 Crowdsourced City**, which connected groups of students from various degree programms within the University (SIPA, Urban Design, Urban Planning, and Architecture) to brainstorm and prototype solutions for various community groups in New York City.

Many design studios have engaged current issues in New York City working with city Agencies on specific projects they are undertaking. For example, in Prof. Laurie Hawkinson's and Kate Orff's Willets Point Studio that involved re-engineering and re-conceptualizing a real 45-acre former ash dump in Queens, students worked with David Burney (New York City Commissioner of the Department of Design and Construction) and utilized the City's site documentation files to inform their projects. The **A4004 Advanced Studio IV** taught by Galia Solomonoff and Liam Gillick worked closely with the University to design an installation in the area in between Fayerweather and Avery Hall; Professor Robert Marino taught a designed studio **A4004 Advanced Studio IV** which involved the design of a boat museum for a local community. Prof. Richard Plunz and his students worked with the government of the Domican Republic via a thinktank (Funglode) in his I hope this helps.on the city of Puerto Plata (**A4004 Advanced Studio IV**), and Michael Bell worked with the Director of the National Historic Landmark-listed Pollock-Krasner House and Study Center in his **A4004 Advanced Studio IV**. All studios encourage detailed attention and response to client and user needs through site visits, analysis, and feedback. **Advanced Studios** allow interaction with international clients in diverse contexts, as, for example, Joshua Prince Ramus taught a studio **A4006 Advanced Studio IV**, met with the client, the TEDx Organization to design a "Speaker's Corner". Another example would be Marcus Dochantschi's studio **A4005 Advanced Studio IV** "MicroCity" which worked on an education center in the Repulic of Congo.

C. 4. Project Management:
Understanding of the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods.

The required course **A4560 Professional Practice** demonstrates understanding of this criterion.

Project delivery methods, service contracts (including AIA Documents), construction documents, project management budgeting, scheduling and monitoring methods, and the architect's responsibility are addressed in **A4560 Professional Practice**. Professional Practice includes both desirable, positive ways of competing for projects as well as aspects to avoid. Emphasis is placed on the desirability of repeat clients, the need to compete on quality rather than fees, and the complex issues of competitions. How the architect selects consultants, whome

the consultants are employed by, and how the coordinate the efforts of the team to obtain the most appropriate and beneficial services are with in depth. Alternate project delivery methods, such as design-bid-build, design-build, and other combinations of the usually separate parties, with pros and cons of each, are considered.

Students also get in-depth exposure to construction documents in **A4114 Architectural Technology IV**, where they spend six weeks using structural, enclosure, and environmental conditioning construction documents to analyze an existing building. Studios like the C-BIP **A4004 Advanced Studio IV** and seminars like **A4783 Workflow: Designing Industry** foreground the issue of collaboration with consultants, the development of competitive proposals, the management of the workflow in design, fabrication and construction and the contractural environment. **Visual Studies** classes like **A4813 Integrated Project Delivery** provide opportunities to extend this understanding.

With the increasing number of design-build classes (**A4670 Design/Build: Design Sequence**, **A4798 Craft in the Digital Age, A4747 Parametric Realizations**), studios (Galia Solomonoff, **A4004 Core Studio IV** Temporary/Contemporary Pavilion) and summer workshops (Italy, Finland, Brazil, etc) students are becoming actively involved in project management. The opportunity to work with the Laboratory for Advanced Building Science on realizing projects like the Art History Slide Library, the Real Estate Development Lecture room and seminar room, the Urban Planning Studio/seminar spaces and the Center for Global Design and Development again give students direct engagement with all aspects of project management.

A significant proportion of the lectures, symposia and conferences are devoted to this theme, particularly in the series of C-BIP think-tanks bringing together experts from design, structure, environmental engineering, materials, fabrication, and construction to discuss the evolving potentials of integeated project delivery.

C. 5. Practice Management

Understanding of the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.

The required course **A4560 Professional Practice** demonstrates understanding of this criterion.

Understanding of the basic principles of office organization, business planning, marketing, negotiation, financial management, and leadership, as they apply to the practice of architecture are discussed with examples. Financial management and issues of fees, time and costs within the discipline are covered. Elements of risk and methods of risk mitigation and transfer including discussions about professional liability insurance, re-insurance, and the factors affecting premiums are considered. Dispute resolution methods and their implications are also outlined in **A4560 Professional Practice**. Real life examples are given for each topic, to illustrate. Students may take **A4312 Real Estate Finance I** as an elective to gain further information with regard to the economics of building. Visits to architectural offices and work experience supplement this understanding.

Many of the public events are designed to inform students about the new conditions of professional practice. Prominent architects from the United States discuss their experience with the practical and cultural issues in global practice and architects from outside the United States are asked to discuss the different modes of practice. The History/Theory and studio classes

addressing effects of globalization on architectural practice focus on this issue. The new multi-year research collaboration with KPF to explore the operation of the global corporate office today focuses on this issue by bringing students in an **Advanced Studio VI** directly into the real world conditions of a large global practice with access to the same clients, consultants, knowledge bases and decision making.The C-BIP studio **A4004 Advanced Studio IV**, and seminars like Juan Herreros **A6180 Architecture Practice as Project** foregrounds the issue.

C. 6. Leadership:
Understanding of the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.

The required course **A4560 Professional Practice** demonstrates understanding of this criterion.

The whole school is aimed towards leadership in design, technology, history and theory. Every aspect of the curriculum is tailored towards establishing new modes of leadership and reinforcing the identity of the professional architect as simultaneously a key practical and cultural service provider and a key source of public inspiration and social advocacy. One of the pedagogical roles of the vast array of visiting speakers to the school, and themes for public debate and classes, is to expose the students to a great diversity of leaders, and a great diversity of areas in which leadership has been offered or is needed. Architecture is understood as a fundamentally collaborative discipline in which a key dimension of the architect's unique professional capacity to lead is the ability to synthesize the inputs of a very wide array of consultants and stakeholders. The ability of the architect to communicate to a wide range of stakeholders and the wider industry, community and public audience is understood to be a crucial dimension of the architect's professional leadership in society.

The school's ever increasing engagement with the real conditions of global cities, architectural practice, industry norms and emergent potentials, economic conditions, ecological conditions, legal environment, historic preservation, and social responsibility has multiplied the occasions in which students are called on to directly present leadership visions or strategies to the stake-holders involved through meetings,events, publications, and exhibitions - demonstrating the ability to both lead and collaborate..

This criterion is addressed in **A4560 Professional Practice**. AIA documents and the role of the architect are also covered. Additional discussion occurs in upper level courses of the **Building Science and Technology curriculum**. Studio classes often stress collaboration, are themselves collaborations with other programs in the school or other departments of the University. Seminars (for example Scott Marble's **A4783 Workflow: Designing Industry** and Mark Green's visual studies workshop **A4813 Integrated Parametric Delivery**) focus on the new techniques with which professionals collaborate and in which architects need to maintain their leadership role. Public events, like C-BIP think-tanks, focus on the architect's leadership role in the face of these new systems of design, analysis, fabrication, construction, monitoring and maintenance. Major research initiatives, like C-BIP, are devoted to fully exploring the new forms of leadership that are available and extend the architect's key role in society. The school is very proud of the recent graduates who are playing a leading role in the evolution of professional practice in these areas.

C. 7. Legal Responsibilities:
Understanding of the architect's responsibility to the public and the client as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.

The required course **A4560 Professional Practice** demonstrates understanding of this criterion.

Methods of incurring legal obligations, by statute, by contract, and by common law are discussed. There is considerable coverage of the range of governmental control, for public safety, health and welfare. Title and practice issues of licensing and state laws, ARE, and IDP are discussed. Building codes, performance, prescriptive zoning regulations, deriving from the first, from NYC's response to the 1916 construction of the Equitable Building, subdivision regulations, historic preservation laws, and private covenants are discussed.

Although the architect's responsibilities in these areas are outlined and discussed in **A4560 Professional Practice**, this criterion is also met in the context of the design studios, specifically in the **A4003 Core Studio III** and **A4004 Advanced Studio IV**. Codes and regulations (including zoning) are addressed in **A4560 Professional Practice**. Technical codes are also covered in the Building Science and Technology sequence through **A4115 Architectural Technology V.** Exposure to practice through faculty and work experience also gives students first hand knowledge of these issues. The joint studio between Architecture and Historic Preservation offers the students an opportunity to extend their understanding of the architect's legal responsibilities by engaging directly with highly regulated real-world commissions where contemporary additions are made to historic buildings. The work on sustainability in a variety of courses and labs likewise foregrounds the legal responsibilities in building codes and the global nature of much work in the school foregrounds the different legal environments in which architects practice. Moreover, the new legal frontier associated with advanced modeling software and Building Information Modeling is at the heart of the C-BIP **A4004 Advanced Studio IV** and the associated series of C-BIP thinktanks with professional and industry leaders. The Studio-X global network engaged with by all students has enabled GSAPP to address the very different legal frameworks of professional practice around the world, particularly as they bear upon the increasingly global nature of architectural practice. The joint KPF **A4006 Advanced Studio VI** on the methods of large global corporate offices is precisely designed to foreground this issue.

C. 8. Ethics and Professional Judgment:
Understanding of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.

The required course **A4560 Professional Practice** demonstrates understanding of this criterion.

The increasing sense of engagement with all practical dimensions of the contemporary world and the role of the architect within them at GSAPP has lead to an ongoing reflection on the ethics of the profession, particularly with regard to the role of the architect in a globalized environment, distinguished by the uneven distribution of resources, a crisis of environmental resources, and cultural conflict at massive scale.

The program's required course, **A4560 Professional Practice**, covers a full range of moral, ethical, legal and practical practice related issues. Problems are posed, discussed and debated. High ethical standards and fairness in practice are demonstrated to produce better projects and more successful practices. The textbook has no chapter on morals because it stresses tthey are an integral part of every aspect of architecture, including design and practice. To this end, design itself is presented as an ethical endeavor. Issues related to judgment in project process and economics are also covered within the **Building Science and Technology** sequence, where all faculty are in architectural or engineering practice. Issues of judgment in process and management are also discussed in the design studios, where nearly all of the design faculty run their own architectural practices. As all students travel with their faculty to different global locations, the ethical responsibility of the profession is again foregrounded in terms of diversity of cultural norms, economic disparity, and different political systems. The responsibility of the architect to make balanced judgements in the face of complex competing demands is highlighted. Issues of energy responsibility, historic preservation, and public space are likewise understood in ethical terms. Summer workshops, like the Global Studio where GSAPP students join with students around the world to work in informal settlements shaped by poverty in Africa and India, or post-crisis collaborative design workshops in New Orelans, Haiti, and Sendai engage students in shaping the figure of the architect in terms of ethical responsibility.

Ethical issues in relation to architectural concerns are the foundation of most of the history/theory curriculum as well. Ethical concerns become a central concern in electives such as **A4469 The History of Architectural Theory**, **A4517 Exotic Moderns: City, Space, and Other Modernities**, **A4780 Architecture, Human Rights, Spatial Politics**

Many of the studio projects (as in the Core Affordable Housing studios, the Advanced Studio taught by Keith Kaseman in post earthquake Haiti and Lynne Breslin and Kunio Kudo's studio about post-tsunami Japan or those devoted to threat, biodiversity and water resource management), or those devoted to informal settlements in Brazil, India and Jordan or the foreclosed crisis in the United States foreground ethical responsibility. GSAPP treats emergency conditions as demanding the highest level of performance from architects in ethical, technical, but also experimental terms. Professor Shohei Shigematsu's **A4006 Advanced Studio VI** on "Post-Crisis Urban and Architecture," for example, examined the demand for new master planning approaches in post-earthquake environment of the Dominican Republic. University conferences like "When do Cities Recover from disaster? Injured Cities Conference," extend the school's thinking on the theme. The ethical importance of pro-bono architectural work is raised in the "Unsolicited Architecture" workshops and exhibitions in Rio, Sao Paulo and Mumbai. Students who become involved in the advanced research projects or the collaborative inter-school Global Studio on slums have the opportunity to both reflect on the ethical obligations of the professional architect and put those obligations into practice. The series of annual "Public Space" design workshops in Amman and Istanbul" bring students from Columbia together with students from a range of universities in the Middle East to collaborate on designs to sustain cosmopolitan exchange in shared public space. In addition, a large proportion of the public events at the School are devoted to the various ethical issues currently facing the architectural profession and the identification of appropriate role models (as, for example, in the series of "Foreclosed" symposia and workshops and symposia "Data and the Public Good," "Favela Exchange," "Who is the Public in Practice," "Housing – A Public Good?," "Politics, Publics and Design," "In Defense of Public Housing," etc.)

C.9. Community and Social Responsibility:
Understanding of the architect's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors.

The required courses **A4002 Core Studio II** and **A4003 Core Studio III** demonstrate understanding of this criterion.

The school is dedicated to a philosophy of community and social responsibility as the inevitable basis of the above points. As expressed in detail earlier in this document, architecture is understood as a shared public good. The respect for historic resources is exemplified in the central strength of the history/theory curriculum and the associated Ph.D. program. The unique central role of the Historic Preservation program in the school, and the joint architecture-preservation studio, exemplify the depth of dedication to preserving and enhancing the shared pubic heritage. This philosophy is established in **A4002 Core Studio II** and **A4003 Core Studio III.** The school maintains its key pedagogical tradition of centering the design curriculum on an urban housing project for this reason. The seminars, symposia and readings associated with the housing studio reinforce this core commitment to shared community values. Most advanced studios are dedicated to dimensions of social responsibility. Seminar courses likewise address different aspects of the architect's responsibility. Many of the labs are devoted to the issue (notably the Urban Design Lab, Social and Technological Change lab). The Buell Center for the Study of American Architecture's multi-year project on the status of the concept of "Public" in contemporary society, and its efforts to revive the concept through a series of symposia, panels, lectures, workshops, publications and ts major "Foreclosed": exhibition in collaboration with the Museum of Modern Art Exemplifies this concern. Countless public events at the school likewise explicitly address community and social responsibility. The Studio-X global network and all the associated classes, events, research projects and publications allow the school to think about how the very definition of the public good and the rights and responsibilities of designers vary enormously between cultures. In an age of global professional practice, this calls for more complex and nuanced understanding of social responsibility. Much of the school is dedicated to developing this understanding and to empowering our graduates to exemplify a life affirming sensitivity to shared good at all the different scales and in all the diverse contexts in which they will practice.

I.2. Curricular Framework

II.2.1. Regional Accreditation

Columbia University has been accredited by the Middle States Commission on Higher Education since 1921. The University is reviewed every ten years and was re-accredited in 2011. Below is a copy of the latest accreditation letter. Our regional accreditation can also be verified on line by clicking on the following URL link. http://www.msche.org/institutions_view.asp?idinstitution=144

MIDDLE STATES COMMISSION ON HIGHER EDUCATION
3624 Market Street, Philadelphia, PA 19104-2680. Tel: 267-284-5000. Fax: 215-662-5501
www.msche.org

STATEMENT OF ACCREDITATION STATUS

COLUMBIA UNIVERSITY
2960 Broadway
New York, NY 10027
Phone: (212) 854-1754; Fax: (212) 865-8670
www.columbia.edu

Chief Executive Officer: Mr. Lee C. Bollinger, President

INSTITUTIONAL INFORMATION

Enrollment (Headcount): 9096 Undergraduate; 17407 Graduate

Control: Private (Non-Profit)

Affiliation: n/a

Carnegie Classification: Research - Very High Research Activity

Degrees Offered: Bachelor's, Postbaccalaureate Certificate, Master's, Post-Master's Certificate, Doctor's - Professional Practice, Doctor's - Research/Scholarship;

Distance Education Programs: Yes

Accreditors Approved by U.S. Secretary of Education: Accreditation Commission for Midwifery Education; American Bar Association, Council of the Section of Legal Education and Admissions to the Bar; American Dental Association, Commission on Dental Accreditation; American Occupational Therapy Association, Accreditation Council for Occupational Therapy Education; American Physical Therapy Association, Commission on Accreditation in Physical Therapy Education; Commission on Collegiate Nursing Education; Council on Accreditation of Nurse Anesthesia Educational Programs; Council on Education for Public Health; Liaison Committee on Medical Education; Midwifery Education Accreditation Council

Instructional Locations

Branch Campuses: None

Additional Locations: London Business School, Regents Park, United Kingdom; Reid Hall, Columbia University in Paris, Reid Hall, France; The University of Hong Kong, Pok Fu Lam Road, Hong Kong; Walter A. Haas School of Business, Berkeley, CA

Other Instructional Sites: Berlin Consortium for German Studies, Berlin, Germany; Columbia in

Be jing at Tsinghua University, Be jing, China; Consortium for Advanced Studies, Barcelona, Spain; Contemporary Summer French Theatre and Performance in Paris, Paris, France; Italian Cultural Studies in Venice, Venice, Italy; Kyoto Consortium for Japanese Studies, Kyoto, Japan; Law Externship - Federal Appellate Court, New York, NY; Summer Arabic Program in Amman, Amman, Jordan; Summer Business Chinese and Internship in Shangai, Shangai, China; Summer Language Program in Be jing, Be jing, China; Summer Program in Advanced and Classical Japanese, Kyoto, Japan; Summer Program in Portuguese Studies, Rio de Janeiro, Brazil

ACCREDITATION INFORMATION

Status: Member since 1921

Last Reaffirmed: November 17, 2011

Most Recent Commission Action:

November 17, 2011: To accept the Periodic Review Report and to reaffirm accreditation. The next evaluation visit is scheduled for 2015-2016.

Brief History Since Last Comprehensive Evaluation:

June 22, 2006: To reaffirm accreditation. The Periodic Review Report is due June 1, 2011.

June 30, 2009: To acknowledge receipt of the substantive change request and to include the contractual agreement with and additional locations at the London Business School, Regent's Park, London, United Kingdom and The University of Hong Kong, Pok Fu Lam Road, Hong Kong provisionally within the scope of the institution's accreditation, pending a site visit within six months of commencing operations at one of the sites. The Periodic Review Report is due June 1, 2011.

March 3, 2010: To acknowledge receipt of the substantive change request and to include the contractual agreement with and additional location at the Walter A. Haas School of Business, The University of California, Berkeley, S545 Haas #1900, Berkeley, CA 94720 within the scope of the institution's accreditation. To remind the institution that the additional locations at the London Business School, Regent's Park, London, United Kingdom and The University of Hong Kong, Pok Fu Lam Road, Hong Kong are included provisionally within the scope of the institution's accreditation, pending a site visit within six months of commencing operations at one of the sites. The Commission requires written notification within thirty days of the commencement of operations at these additional locations. In the event that operations at these additional locations do not commence within one calendar year from the approval of this action, approval will lapse. The Periodic Review Report is due June 1, 2011.

June 24, 2010: To note the recent visit by the Commission's representative and to affirm the inclusion of the additional locations at the London Business School, Regent's Park, London, United Kingdom and The University of Hong Kong, Pok Fu Lam Road, Hong Kong within the scope of the institution's accreditation. The Periodic Review Report is due June 1, 2011.

Next Self-Study Evaluation: 2015 - 2016

Next Periodic Review Report: 2021

Date Printed: August 28, 2012

DEFINITIONS

Branch Campus - A location of an institution that is geographically apart and independent of the main campus of the institution. The location is independent if the location: offers courses in educational programs leading to a degree, certificate, or other recognized educational credential; has its own faculty and administrative or supervisory organization; and has its own budgetary and hiring authority.

Additional Location - A location, other than a branch campus, that is geographically apart from the main campus and at which the institution offers at least 50 percent of an educational program. **ANYA** ("Approved but Not Yet Active") indicates that the location is included within the scope of accreditation but has not yet begun to offer courses. This designation is removed after the Commission receives notification that courses have begun at this location.

Other Instructional Sites - A location, other than a branch campus or additional location, at which the institution offers one or more courses for credit.

Distance Education Programs - Yes or No indicates whether or not the institution has been approved to offer one or more degree or certificate/diploma programs for which students could meet 50% or more of their requirements by taking distance education courses.

EXPLANATION OF COMMISSION ACTIONS

An institution's accreditation continues unless it is explicitly suspended or removed. In addition to reviewing the institution's accreditation status at least every 5 years, actions are taken for substantive changes (such as a new degree or geographic site, or a change of ownership) or when other events occur that require review for continued compliance. Any type of report or visit required by the Commission is reviewed and voted on by the Commission after it is completed.

In increasing order of seriousness, a report by an institution to the Commission may be accepted, acknowledged, or rejected.

Levels of Actions:

Grant or ~~Re-Affirm Accreditation~~ without follow-up

~~Defer a decision on initial accreditation:~~ The institution shows promise but the evaluation team has identified issues of concern and recommends that the institution be given a specified time period to address those concerns.

~~Postpone~~ a decision on (reaffirmation of) accreditation: The Commission has determined that there is insufficient information to substantiate institutional compliance with one or more standards.

~~Continue~~ accreditation: A delay of up to one year may be granted to ensure a current and accurate representation of the institution or in the event of circumstances beyond the institution's control (natural disaster, U.S. State Department travel warnings, etc.)

~~Recommendations to be addressed in the next Periodic Review Report:~~ Suggestions for improvement are given, but no follow-up is needed for compliance.

~~Supplemental Information Report:~~ This is required when a decision is postponed and are intended only to allow the institution to provide further information, not to give the institution time to formulate plans or initiate remedial action.

~~Progress report:~~ The Commission needs assurance that the institution is carrying out activities that were planned or were being implemented at the time of a report or on-site visit.

~~Monitoring report:~~ There is a potential for the institution to become non-compliant with MSCHE standards; issues are more complex or more numerous; or issues require a substantive, detailed report. A visit may or may not be required.

Warning: The Commission acts to Warn an institution that its accreditation may be in jeopardy when the institution is not in compliance with one or more Commission standards and a follow-up report, called a monitoring report, is required to demonstrate that the institution has made appropriate improvements to bring itself into compliance. Warning indicates that the Commission believes that, although the institution is out of compliance, the institution has the capacity to make appropriate improvements within a reasonable period of time and the institution has the capacity to sustain itself in the long term.

Probation: The Commission places an institution on Probation when, in the Commission's judgment, the institution is not in compliance with one or more Commission standards and that the non-compliance is sufficiently serious, extensive, or acute that it raises concern about one or more of the following:

1. the adequacy of the education provided by the institution;
2. the institution's capacity to make appropriate improvements in a timely fashion; or
3. the institution's capacity to sustain itself in the long term.

Probation is often, but need not always be, preceded by an action of Warning or Postponement. If the Commission had previously postponed a decision or placed the institution on Warning, the Commission may place the institution on Probation if it determines that the institution has failed to address satisfactorily the Commission's concerns in the prior action of postponement or warning regarding compliance with Commission standards. This action is accompanied by a request for a monitoring report, and a special visit follows. Probation may, but need not always, precede an action of Show Cause.

Suspend accreditation: Accreditation has been Continued for one year and an appropriate evaluation is not possible. This is a procedural action that would result in Removal of Accreditation if accreditation cannot be reaffirmed within the period of suspension.

Show cause why the institution's accreditation should not be removed: The institution is required to present its case for accreditation by means of a substantive report and/or an on-site evaluation. A "Public Disclosure Statement" is issued by the Commission.

Remove accreditation. If the institution appeals this action, its accreditation remains in effect until the appeal is completed.

Other actions are described in the Commission policy, "Range of Commission Actions on Accreditation."

II.2.2. Professional Degrees and Curriculum

Master of Architecture
(non -professional degree and 108 credits)

The Columbia University Graduate School of Architecture Preservation and Planning offers a three-year Master of Architecture degree (M.Arch.—first professional degree). Prior architectural study is not a requirement. To qualify for graduation with the M.Arch. degree, students with no prior architectural education are required to take 54 class points of studio design, 18 points of history/theory, 18 points of building technologies, nine points of methods/practice, six points of visual studies, and six points of elective offerings. Students entering the program upon completion of a College level, non-professional architectural degree or related degree may receive advanced standing for some course work. A total of 108 points are required of all students graduating from the M.Arch. Program.

M. Arch - Curriculum Structure - by Category of Study

To graduate with a Master of Architecture degree, a student is required to have 108 graduate-level course points that are approved by the Graduate School of Architecture, Planning, and Preservation. These course points are a combination of required courses, a certain number of points of distribution course requirements, and elective course points. The courses are divided into the following categories: Studio, History/Theory, Building Technologies, Visual Studies, Methods/Practice, and Elective. Each category (except elective) has requirements that must be filled. (See Table following).

1. Studio Course Sequence
Core Studios Director: Michael Bell
Advanced Studios Director: Laurie Hawkinson

The Studio Sequence is the focus of the M.Arch. Program. During the three-year, six-term program each student may study with as many as six different critics. All studio work is subject to formal public design review, and design juries include visiting architects, historians, artists, critics, and engineers, as well as faculty members from the Architecture, Building Design, Urban Design, Planning, and Historic Preservation programs of the School.

The Core Studios are composed of a carefully structured three-term sequence involving a series of interrelated projects that begin with an examination and utilization of fundamental space-making elements (line, plane, volume), and that are directed toward the ordering of hierarchical spatial sequences, the engagement of the phenomena involved in the act of making or constructing, and the occupation of space. Studio projects involve the issues of public and private, urban and suburban, context and program, analysis and invention, among others, and progressively increase in length from two weeks to twelve weeks.

In the Advanced Studios, themes and programs are defined by the individual critics. These themes and programs both carry an educational objective and present an opportunity for the critic to develop with his or her students a specific area of work or research. The Advanced Studios are intended to build upon the ideas and skills developed in the Core Studios. The range of faculty and studio projects in studio sections allows the student to work with those instructors on projects that will allow specialized design study. In contradistinction to the Core Studios, the

last two semesters of Advanced Studios are open to M.Arch. students as well as to second professional degree students.

A. Requirements for M.Arch Program

Six sequential studios starting in autumn term, first year:

A4001	Core Studio I	9 pts
A4002	Core Studio II	9 pts
A4003	Core Studio III	9 pts
A4004	Advanced Studio IV	9 pts
A4005	Advanced Studio V	9 pts
A4006	Advanced Studio VI	9 pts
	Total:	54 pts

2. History/Theory Course Sequence
Director: Kenneth Frampton

The History/Theory curriculum stresses a broad social and cultural approach to architecture history. Architecture history is not seen primarily as stylistic evolution, but rather in terms of a rich matrix of parameters—political, economic, artistic, technological, and theoretical—that have had a role in shaping the discipline. Most instructors of architecture history at GSAPP have both professional and academic degrees. A shared intention is to understand the relations between practice and a historical perspective.

The course offerings are structured to provide each student with an opportunity to gain both a broad general background in architecture history and a degree of specialized knowledge in areas of his or her selection. Classes in the Department of Art History and Archaeology supplement the architecture history classes within the School, and students are especially encouraged to take art history courses examining pre-1750 and non-Western topics. Students may also take courses in other departments of the University, such as history and philosophy, providing they meet basic distribution requirements.

A. Prerequisite for Entry into M.Arch. Program

Any 3-point course in the history of architecture is required for entry. A broad survey of world architecture is especially recommended.

B. Requirements for M.Arch. Program

Two sequential courses:

A4348	History of Architecture I: 1700-1850	3 pts
A4349	History of Architecture II: 1850-1930	3 pts
	Total:	6 pts

If a student has had a similar class or classes, he or she may petition the professor of the class to waive the requirement.

C. Distributional Requirements for M.Arch. Program

Four courses Total: 12 pts

The four courses must be chosen from five categories: (1) Pre-1750, (2) Modern: 1750 to the Present, (3) Urban Society, (4) American, and (5) Non-Western. Students are expected to combine breadth in those fields they have not previously studied with in-depth seminars in at least one of these categories. At least one of the distribution areas must be Pre-1750 and one in Non-Western Architecture, unless a waiver is granted. Each term's course schedule will identify those courses fulfilling the distribution requirements.

A4348	History of architecture I: 1750-1850	3 pts
A4349	History of architecture II: 1850-1930	3 pts
A4356	Contemporary Chinese City	3 pts
A4229	Studies in tectonic culture	3 pts
A4722	Network City	3 pts
A4515	Network Culture: History / Theory	3 pts
A4566	Exhibition Histories: Curatorial Theories	3 pts
A4726	Other Design	3 pts
A4330	Urban History I	3 pts
A4332	European Urbanism & Cartography in 16th-18th Century	3 pts
A4336	Architecture culture: 1943-1968	3 pts
A6455	Vauban's Military Urbanism	3 pts
A4618	Architecture: The Contemporary	3 pts
A4803	The Dictionary of Received Ideas	3 pts
A6778	Imperatives of Urbanism	3 pts
A6779	Philosophies of the City	3 pts
A4326	Architectural Visualization: 1900-2000	3 pts
A4341	American architecture: 1876-1976	3 pts
A4341x	American architecture before 1876	3 pts
A4344	Traditional Japanese Architecture	3 pts
A4648	Beyond Beauty: The Sublime and The Picturesque	3 pts
A6769	History of the American City	3 pts
A4532	Design and Disease: New Typologies	3 pts
A4460	Japanese urbanism	3 pts
A4469	The history of architectural theory	3 pts
A4480	Elements of landscape architecture	3 pts
A4529	Post-Colonial Architecture and Urbanism	3 pts
A4517	Exotic moderns: city, space, and other modernities	3 pts
A4616	World Architecture + The Modern Tradition	3 pts
A4705	Architecture after 1945	3 pts
A6670	The American University: Architecture and the Enlightenment	3 pts
A4596	12 Dialogical and poetic strategies	3 pts
A4598	Modern Housing	3 pts
A4605	Italian Renaissance architecture, 1400-1600	3 pts
A6190	Rule v.s. Freedom	3 pts

A4390	Postwar Japanese Architecture	3 pts
A6454	Re-framing the Middle East	3 pts
A4618	The contemporary (from 1968 to the present)	3 pts
A4676	New spaces of housing: Re-structuring of public housing	3 pts
A4688	Public space and recombinant urbanism	3 pts
A6769	History of the American city	3 pts
A4642	Space + the Politics of Memory	3 pts
A4566	Architecture, Print, Politics: Case Studies 1945 to 1975	3 pts
A6454	Arab Cities in Evolution	3 pts

3. Building Science and Technology Course Sequence
Director: Phillip Anzalone

The Building Science and Technology curriculum is based on the belief that architects benefit by using a basic knowledge of technical systems to help generate a building's spaces, forms, and expression. Accordingly, the curriculum develops an understanding of contemporary technical-utilitarian systems, and explores their resolution in relation to programmatic development and spatial design.

The six-course required sequence begins by outlining the environmental conditions that habitable spaces respond to, and by describing the physical characteristics of building components. Next, individual building systems—including (primarily) structure, building enclosure, environmental conditioning, and information management—are described in depth. For each system studied, various design strategies, materials, fabrication techniques, and didactic built works are explored. Field trips, laboratory demonstrations, and short design problems augment class study. As both qualitative and basic quantitative concepts are mastered, the curriculum shifts its focus to increasingly complex systems serving entire buildings. The sequence's last two courses (**A4114 Architectural Technology IV** and **A4115 Architectural Technology V**) concentrate on how these systems are detailed, interact with each other, and inform a building's spaces and formal expression—first through in-depth case studies of entire buildings, and then by preliminary design of an industrial-loft block. In both courses, students work in teams with structural, mechanical, and building-envelope experts.

Throughout the required sequence, students are encouraged to apply their growing technological knowledge to design problems posed in studio. Occasionally, studios focusing on various relationships between technology, utility, program, and form are offered for third-year students.

A. Prerequisite for Entry into M.Arch. Program

Any 3-point course in general physics or two 3-point courses in calculus

B. Requirements for M.Arch. Program

Six sequential courses are required:

A4111	Architectural Technology I	3 pts
A4112	Architectural Technology II	3 pts
A4113	Architectural Technology III	3 pts

A4114	Architectural Technology IV	3 pts
A4115	Architectural Technology V	3 pts
AXXXX	Architectural Technology VI - Tech Elective	3 pts
	Total:	18 pts

C. Electives for M.Arch. Program

Advanced electives supplement the required curriculum and provide the basis of study for those students entering the school with a strong technical background. The electives focus on recent technological developments and their impact on design, and the historical relationships between technology, philosophy, politics, and architecture. These courses take advantage of New York's professional practitioners working with the technological state-of-the-art. The diverse views of architectural technology held by both the School's design and technology instructors are reflected in, and thereby strengthen, the elective offerings.

Electives are open to all students in the School, subject to the prerequisites listed in the course descriptions. Students waived out of A4111 Architectural Technology I, A4112 Architectural Technology II, A4113 Architectural Technology III, or A4114 Architectural Technology IV, must take a course from the following list for each waived course. Some courses are not offered every year. Additional technology electives are taught occasionally.

A4118	Exalted Structure	3 pts
A4707	Digital Detailing: Simulation and Analysis	3 pts
A4776	Infrastructure: Man, Machine and the Augmentation of Earth	3 pts
A4781	Surface, Screen and Structure	3 pts
A4783	Workflow: Designing Industry	3 pts
A4788	Modular Architecture: Strategy/Technology/Design	3 pts
A6148	Saturated Models	3 pts
A4670	Design / Build: Design Sequence	3 pts
A4656	Fast Pace / Slow Space	3 pts
A4645	Philosophy of Technology	3 pts
A4635	Architectural Daylighting	3 pts
A4627	Materials and methods in architecture	3 pts
A4634	Advanced curtain walls	3 pts
A4684	Sustainable design	3 pts
A4628	Acoustics	3 pts
A4182	From the Ground Up	3 pts
A6120	Architecture Bio-synthesis	3 pts

4. Visual Studies Course Sequence
Director: Laura Kurgan

The Visual Studies Sequence is intended to develop and improve the student's capacity for graphic representation of three-dimensional architectural form and space. It involves the presentation and utilization of increasingly sophisticated and precise drawing techniques, both drafted and freehand, as well as the development of one-to-one fabrication techniques.

A. Electives for M.Arch. Program

A4568	Mapping	1.5 pts
A4546	Cell City	1.5 pts
A4141	Beyond Prototype	1.5 pts
A4378	Living architecture I	1.5 pts
A4379	Living architecture II	1.5 pts
A4711	Search: Advanced Algorithm	1.5 pts
A4716	Graphic Presentation	1.5 pts
A4717	Adv. Graphic Presentation II	1.5 pts
A4715	Re-Thinking BIM	1.5 pts
A4718	Cinematic Communication	1.5 pts
A4720	Meshing	1.5 pts
A4730	Adaptive Formulations I	1.5 pts
A4731	Adaptive Formulations II	1.5 pts
A4741	Field of Play: Agency in Mapping Site	1.5 pts
A4766	Animated Computation 1	1.5 pts
A4743	Animated Computation 2	1.5 pts
A4747	Parametric Realizations	1.5 pts
A4748	Special Topics in Fabrication Formworks	1.5 pts
A4792	Approaching Convergence	1.5 pts
A4793	App-itecture	1.5 pts
A4798	Craft in the Digital Age	1.5 pts
A4799	Montage City: Filmmaking as Site Analysis	1.5 pts
A4812	Managing Complexity	1.5 pts
A4813	Integrated Project Delivery	1.5 pts
A4814	Hacking the Urban Experience	1.5 pts
A4524	Topological study of form	1.5 pts
A4525	Simulation as the origin of tangible form	1.5 pts
A4534	Techniques of the ultrareal	1.5 pts
A4542	Imagining the ultrareal	1.5 pts
A4559	Drift cinema: practice	1.5 pts
A4676	Architectural photography	1.5 pts
A4615	Architectural photography II	1.5 pts
A4801	Encoded Matter: Workshop in Computational Craft	1.5 pts
A4784	Representational Theories and Techniques	1.5 pts
A4764	Communicated Complex Ideas in Public Setting	1.5 pts
A4752	Swarm Intelligence	3 pts
A4787	Beyond the Outlet: The Materiality of Decentralized Energy Systems	1.5 pts
A4794	Body Craft: Form, Function and New Material	1.5 pts
A4782	Fast Forward	1.5 pts
A4816	Climatic Design and Conceptualization	1.5 pts
A4817	Binary Space Partition	1.5 pts
A4815	X Information Modeling	1.5 pts

5. Methods/Practice Course Sequence
Director: Paul Segal

The Methods/Practice Sequence introduces the student to various aspects of professional practice including computer-aided design, project and office management, developmental processes, legal and planning regulation, etc. These serve as an introduction to areas to be further developed during the three-year apprenticeship period (following completion of the M.Arch. Program) required for professional licensing.

A. Requirements for M.Arch. Program

A4509	Architectural drawing I	3 pts
A4511	Architectural drawing II	3 pts
A4535	Fundamentals of digital design	3 pts
A4560	Professional practice	3 pts

6. Electives

In addition to those courses listed above in categories II-V, any of which may be taken as an elective, courses offered by the Urban Planning and Historic Preservation programs when taken as electives may be applied toward completion of the M.Arch. degree.

A. Electives in Other Schools and Departments

Students may choose courses from other schools and departments of the University for M. Arch. Elective credit. These courses should be directly related to the student's professional program within the School, and these courses must be at the graduate level (course numbers 4000 and above). Exceptions may be granted only by the Dean or course sequence directors. Approval for these courses must be obtained during the registration period for the semester during which they are to be taken, and provided to the Office of Admissions.

Concentrations

Given the diversity of backgrounds of incoming students, the School has seen the importance in developing a wide range of electives, which allow for areas of concentration for those students who come from strong architectural backgrounds and/or practice. Occasionally, students coming from particular interests, for example: engineering or art history are also served well by this ability to concentrate in a field of interest. Students generally develop interests in one of three areas: History/Theory, Building Technologies, and Computer-Aided Practice.

M. Arch - Curriculum Structure – by Semester Credit Hour Load

Courses for the Master of Architecture degree are listed to illustrate the minimum number of credit hours for each semester.

Term 1 (Fall)

A4001	Core studio, I	9 pts
A4111	Architectural Technology, I	3 pts
A4348	History of architecture, I	3 pts
A4509	Architectural drawing, I	3 pts
	Total:	18 pts

Term 2 (Spring)

A4002	Core studio, II	9 pts

A4112	Architectural Technology, II	3 pts
A4511	Architectural Drawing, II	3 pts
A4349	History of architecture, II	3 pts
		Total: 18 pts

Term 3 (Fall)

A4003	Core studio, III	9 pts
A4113	Architectural Technology, III	3 pts
A4114	Architectural Technology, IV	3 pts
	History/theory distribution	3 pts
		Total: 18 pts

Term 4 (Spring)

A4004	Advanced studio, IV	9 pts
A4115	Architectural Technology, V	3 pts
	History/theory distribution	3 pts
	Visual Studies (A/B)	3 pts
		Total: 18 pts

Term 5 (Fall)

A4005	Advanced studio, V	9 pts
A4560	Professional practice	3 pts
	Tech Elective	3 pts
	History/theory distribution	3 pts
		Total: 18 pts

Term 6 (Spring)

A4006	Advanced studio, VI	9 pts
	History/theory distribution	3 pts
	Electives	6 pts
		Total: 18 pts

II.2.3. Curriculum Review and Development

Given the core mission of the school to both provide the highest contemporary standards of professional practice and carry out design research on the possible best practices of the future, curricular review is necessarily a continuous multi-dimensional process. It is also an integral part of long term planning. One of the key mechanisms of review is faculty task forces are set up by the Executive Committee to review particular areas of the curriculum, make recommendations and monitor the success of any changes made. The leaders of these task forces are typically those in charge of that section of the curriculum: Director of Advanced Studios, Director of Core Studios, Director of Visual Studies etc, but the team can include teachers from other areas of the curriculum, tenured and untenured faculty and members of the administration with responsibilities in that area. These groups carry out in depth analysis, consulting with all relevant faculty, staff and student representatives. In 2007, for example, a faculty task force worked on the curricular area of visual studies (as noted in long term planning) – leading to a redesign of the required classes in representation and the launch of a new system of elective visual studies workshops that has been very successful and the appointment of a Director for that part of the curriculum. The redesigned classes have already been formally reviewed again by a task force and adjusted as part of the general spirit of continuous review. The Technology curriculum has recently been reviewed in this way and the review of the History/Theory curriculum has been started. Regular meetings of all full time architecture faculty are now being used to similarly review the interaction and synergy between all the different curricular areas in detail.

These focused review committees on instruction meet for as long as necessary to make a definitive proposal. Such proposals can include the revision or elimination of existing classes, new classes, sequences of classes, type of classes, types of teachers and type of assignments. Recommendations for new faculty hires often accompany such proposals and in reverse new faculty hires often spur curricular review in order to maximize strength and quality in that area. Search committees are traditional sites for in depth review of curricular strengths and adjustments in long term planning. The leaders of the committees are asked to report the concluding results of their thinking to the Executive Committee when the resulting appointments are made. This explanation then acts as the guidelines for the sequences of reviews of the incoming faculty member's contribution to the curriculum. Search committees also typically identify areas in which future appointments might be made, spurring the process to start again. Continuous close review of studio lottery results, class sizes, student reviews of faculty, faculty reviews of students, comprehensive reviews of student portfolios, reviews of tenure track faculty, etc are used to make ongoing adjustments to the curriculum. Directors of specific parts of the curriculum work closely with the coordinators of subsections of the curriculum to design, monitor and refine the classes. The Director of the Core Studios, for example, works closely with the Coordinators of Studio I, II and III each year to develop the studio brief, site, exercises, and submission requirements for the coming year and works with the dean on the selection of faculty, and advising of faculty where necessary, based on the analysis of the previous year's work in that curricular area. The Dean attends part of most final studio reviews to assess the quality of work, teaching, assignments, etc. The final portfolio review where the collected faculty analyze the sequence of all design projects done at the school by each student before approving graduation offers a very clear view of the program's integrated effect and acts as an important guide to curricular refinement. A new policy of having all students submit their presentation files to the school is being introduced to assist this review process by faculty and create an ongoing archive.

II.3. Evaluation of Preparatory/Pre-professional Education

Prerequisites and Requirements for Admission

Eligibility for admission

The M.Arch. at Columbia is the first professional degree in architecture; therefore, students who already hold a professional degree (such as the 5-year B.Arch. degree) are not eligible to apply to the program. Students who have studied architecture in non-professional programs (such as a 4-year program in architecture) may apply, with the possibility of obtaining advanced standing for some course work. Prior architectural study is not a requirement. Regardless of prior experience, all students fill out the same application forms and send supporting materials (as described below). Applications and all supporting materials are due on January 15. Students are admitted to the M.Arch. Program for the autumn term only.

Academic Preparation

1. All applications must have, at the time of first registration, an undergraduate degree from an accredited College or University. Applicants are required to take the Aptitude Test of the Graduate Record Examination. Information may be obtained from the Graduate Record Examination, Educational Testing Service, Box 955, Princeton, NJ 08540.
2. Applicants who have no prior background in architecture must complete a 3-point course in architectural graphic presentation as a prerequisite for the Core Studio Sequence, before first registering in the M.Arch. Program.
3. To fulfill the Prerequisite for the History/Theory Course Sequence all applicants must have completed a 3-point survey course in architectural history dealing with any of the following periods: Classical to Renaissance, Renaissance to Modem, or Modem.
4. To fulfill the prerequisites for the Building Science and Technology Course Sequence, all applicants must have completed a 3-point course in general physics or two 3-point calculus courses.

Applicants are strongly advised but not required to complete the following non-mandatory course work: one term of studio in the visual arts (drawing, painting or sculpture). In addition, a reading knowledge of a modem foreign language, a course in environmental studies, and additional courses in architectural history are recommended.

Portfolio

In addition to the application form and supporting documents, applicants must submit a portfolio showing evidence of their visual acuity and graphic abilities: paintings, drawings, prints, graphic designs, or architectural drawings. It is recommended that evidence of freehand drawing skills be included. Submitted materials, either original work or reproductions of the originals, should not exceed 8-1/2 by 11 inches and should not measure more than 1/2 inch in thickness. Portfolios exceeding these specifications will be returned before the reviewing period. The pages should not be placed in a ring binder, and each page must be clearly marked with the applicant's name.

Application

Placement into Studio Sequence

Students who are admitted into the M.Arch. Program are informed in their letters of admission of the level at which they will enter the Core Studio Sequence. Based on the evidence submitted in the portfolio, the student's status in relation to the prerequisites and requirements of the studio sequence is determined. Placement into a more advanced studio is not done by application or petition, but is determined by a faculty committee during the admissions process. A limited number of students may receive advanced standing points for Architecture A4001 and A4002 Core Studio I and II, thereby reducing the required studio sequence by two years. After the Student's status has been determined by the M.Arch. Committee on Admission, it is not subject to further review by the Graduate School of Architecture, Planning, and Preservation. No subsequent petitions for advanced standing in design studio courses are considered. Students who are placed into advanced studios should consult with the admissions office about their curriculum.

Transferring Academic Credit

Students who have completed acceptable architecture course work prior to entering the M. Arch. program may apply for advanced standing credit or course waivers in non-studio courses. No requests for advanced standing credit are considered until official copies of relevant transcripts have been submitted to the Office of Architecture Admissions.

There are two situations in which one may receive advanced standing in the M. Arch. Program: (1) a student who is admitted into the second year of the M. Arch. Program may receive advanced standing for the first-year courses including the two design studios (potentially 36 points); (2) a student admitted into the first year with an undergraduate degree in architecture may receive credit for some courses; credit will be evaluated on an individual basis (maximum 9 points).

Information regarding procedure for students who wish to petition for advanced standing or course waiver is available at the time of first registration in September. Students may receive the approvals from faculty or directors at any time after enrollment. Official transfer of credit by the Columbia University registrar, however, cannot be entered on the transcript until one year of full-time enrollment in the M. Arch. Program has been completed. Advanced standing forms are available in the Office of the Dean of Admissions and should be returned there for review.

Petitions for advanced standing credit in non-studio courses are normally reviewed by a faculty member, who teaches the equivalent course, within the Graduate School of Architecture, Planning, and Preservation. Advanced standing credit is awarded only for courses in which students have received a grade of C or better. In some cases, faculty members may ask to see examples of previous course work. Students are advised to have course descriptions and previous course work on hand at September registration to facilitate planning an academic program with an advisor.

Required documentation for advanced placement normally includes official course transcripts, catalog course descriptions, and at least one of the following: a course syllabus, complete course notes, or a complete set of tests, homework, and course-project documentation.

There are three circumstances under which courses can be waived: (1) the student presents evidence of professional experience in related subject matter; (2) the student passes a formal examination on the subject (with the approval of the course instructor); or (3) the student presents evidence of having passed relevant courses at the undergraduate or graduate levels. Because waivers do not carry point or course credit, elective courses must be taken to fulfill the point requirements for the M. Arch. Degree. (Students waived from Structures II, Enclosures &

environments II, Building systems I, or Buildings systems II, must take a Building Technologies elective for each course waived.

II.4. Public Information

II.4.1. Statement on NAAB-Accredited Degrees

The Bulletin for the Graduate School of Architecture, Planning, and Preservation, distributed to all the incoming students at the beginning of the Fall semester includes the text specified in Appendix 5 of the 2009 NAAB Conditions for Accreditation; Images of this inclusion are included in PART FOUR: Section 4, of this Architecture Program Report. Additionally this text is included on the School's website accessible by clicking on the following hyperlink or by entering the URL into your web browser.

www.arch.columbia.edu/courses/program-requirements/march

II.4.2. Access to NAAB Conditions and Procedures

GSAPP's website includes a links section with links to the documents required in this section (II.4.2). This website can be accessed by clicking on the following hyperlink or by entering the URL into your web browser.

www.arch.columbia.edu/resources/naab

II.4.3. Access to Career Development Information

GSAPP's website includes a links section with a link links to the documents required in this section (II.4.3). This website can be accessed by clicking on the following hyperlink or by entering the URL into your web browser.

www.arch.columbia.edu/resources/careerdev

II.4.4. Public Access to APRs and VTRs

APRs and VTRs are publically available at the School's office.

II.4.5. ARE Pass Rates

GSAPP's website includes a links section with a link to the NCARB published ARE pass rates required in this section (II.4.5). This website can be accessed by clicking on the following hyperlink or by entering the URL into your web browser.

www.arch.columbia.edu/resources/passrates

Part Three (III). Progress since Last Site Visit

A. Responses to Conditions Not Met

13.25 Construction Cost Control

"Understanding of the fundamentals of building cost, life-cycle cost, and construction estimating."

Comment from previous VTR [2007] "Issues of estimating construction costs, lifecycle costs, and the resulting material selection decisions were not in evidence to a level of understanding. General awareness of budgeting is introduced in fabrication electives and the Core III Housing Studio."

Response from Program: Cost control issues are integrated into the lectures of **A4111 Architectural Technology I, A4114 Architectural Technology IV** and **A4115 Architectural Technology V**, as well as cost estimating discussions in the Professional Practice course in which estimated methods and responsibility for costs are covered. Students do cost take-off measurements and quantity counts, develop rough cost estimates based on historic and localized data sets for comparing regional cost implications, research alternative value-engineering schemes, and produce a report outlining the economic viability of the studio proposal.

An experienced professional from the local construction industry now gives a guest lecture in financial analysis to the **A4115 Architectural Technology V** students which becomes the basis for design decisions throughout the semester. Research projects and events at the School increasing explore the role of BIM, and new design analysis fabrication and construction technologies in improving cost control from design through to realization. The ability for architects to actively participate in guiding efficiiences and monitoring results in real-time budgets is emphasized repeatedly. The increasing number of design-build projects literally place students at the heart of this issue.

13.26 Technical Documentation

"Ability to *make technically precise drawings and write outline specifications for a proposed design.*"

Comment from previous VTR [2007] "While technical skills are clearly apparent in the work of the students, the team found no evidence of writing outline specifications in any of the required course work."

Response from Program: Technical Documentation is introduced in A4111 Architectural Technology I. In A4115 Architectural Technology V, as part of the comprehensive technical design problem, students will be required to study an outline specification for a façade system and produce a complete technical report including narrative of systems and building program, description of materials and assemblies in addition to performance calculations of structure, heat load, and MEP systems. As previously noted, in the Professional Practice course there are lengthy discussions about how to write specifications, CSI format, prescriptive vs. performance, sections of specifications and topics included, general vs. specific, how the technical sections of

specifications fit into the project manual, and how correlation and intent work vs. relationship between specifications and working drawings.

B. Responses to Causes of Concern

Access to Academic Advisers

Comment from previous VTR [2007] (quote in full) "The school needs to provide formalized, consistent access for students to academic advisers who offer guidance towards successful completion of the degree, Master of Architecture.".

Response from Program: A number of significant additions to the advising and comprehensive review schedule have been made and are presented the chart below. Student feedback has been positive to the items in italics, which are things added in 2010-2011 to the advising and comprehensive review schedule. 3rd year transcript/graduation requirements review has been further formalized by issuing of progress chart to each 3rd year student. The resulting schedule of Student and Academic Advising is included in the main narrative above.

M Arch Program Advising and Comprehensive Review Schedule					
When		Participants		Forma	Requirements
1st year	January	Lndividual	w/ Dean of Admissions+ Faculty	Curriculum Advising	NA
	January	Group	w/ MArch II + III students	Portfolio Workshop Student to Student Advising- *RUN BY STUDENT COUNCIL*	NA
2nd year	December *or January*	Group	w/ Studio Faculty	Core Studio Discussion *Exhibition and Viewing on 100 level of all work*	*Exhibition - Housing work*
	January	*Individual*	*w/ Studio Critic*	*Individual*	*Portfolio*
	April	Individual	w/ Studio Faculty	Comprehensive Studio Review	Portfolio required

3rd year	September	Individual	w/ Dean of Admissions + Faculty	Transcript Review	Transcript supplied by Admission's Office
	Oct, Nov + Jan	*Group*	*w/ Studio Faculty + Outside Critic*	*Portfolio workshop, lecture and tutorials*	*NA*
	January	*Individual*	*w/ Studio Critic*	*Individual*	*Portfolio*
	April	Individual Submission	Faculty	Portfolio Review	Portfolio required

Lack of Refined Models

Comment from previous VTR [2007] "The lack of refined physical models in student work indicates that the model shop cannot accommodate the full needs and opportunities of the program."

Response from Program: As planned, in the summer of 2011, the traditional woodshop facility was integrated with the digital fabrication facility, resulting in a net increase of approximately 350 square feet for all GSAPP modeling facilities and the ability to supervise the space for extended hours. This integration allowed for the introduction of additional capabilities in the newly designated laboratory for Applied Building Sciences. These include plasma cutting, hydraulic bending of metal, additional CNC milling capabilities, vacuum forming, and plaster casting. The number and quality of models is increasing throughout the program, through greater access to the workshop, model making equipment, greater student and faculty interest in fabrication, assembly and construction, along with increased use of models in teaching methodology. The number of models in Core I, II and III have significantly increased and many of the advanced studio critics (Amale Andraos, Josh Ramus etc) require them as central to their methods, basing all reviews on models rather than drawings or renderings..Model making has become a major part of the exhibition of work within the school and at venues in New York and around the world.

Student Diversity

Comment from previous VTR [2007] "The lack of a representative number of African-American and Latino/Hispanic students suggests that not enough effort has been applied to this serious social and cultural priority."

Response from Program: GSAPP continues to be concerned about the low numbers of African-American and Latino/Hispanic students and has developed a three year plan to address the issue

as part of its wider commitment to all forms of diversity. The school believes that role models in the teaching faculty, and a teaching and research culture engaging with the African-American community is a key factor. The recent tenuring of the prominent scholar and designer Mabel Wilson in the Architecture faculty is a key part of this process. Prof Wilson has been awarded the George Rupp Professor of Community Development at GSAPP and is Co-Director of the newly formed Global Africa Lab with Prof, Mario Gooden to focus on the African diaspora in American cities but equally to carry out design research in Africa itself. Professor Wilson and our Admissions Officer, Fatou Dieye, are leading our recruitment efforts, and recently conducted sessions for prospective students at the National Organization of Minority Architects annual convention.

One of Professor Wilson's major intitatives at GSAPP has been to launch and Direct the **Design Leadership Project at Historically Black Colleges and Universities (HBCUs.** To quote Professor Wilson:

"Today it is estimated that the seven HBCUs hosting accredited programs in architecture teach 45-55% of African American students matriculating in architecture programs in the U.S. (some put the estimate higher at 80%). The remaining African American students study at what the report African American Architects and Their Education characterizes as "majority" institutions. The report cites the GSAPP as having the highest number of African American alumni who are licensed architects. Today communities where many African Americans live must contend with environmental degradation, imprudent redevelopment, extensive foreclosed properties, and loss of cultural heritage. In response to these urgent matters, it is vital we educate architects who can thoughtfully respond to these needs and diverse constituencies. To accomplish this goal, the education of young architects requires a multifaceted curriculum that hones design skills, technological proficiency, and comprehension of history and culture. In the education of the architect this training coalesces in the core course of design studio in which students work intensely with one or more faculty on a multi-faceted design proposal. The Design Leadership Project uses the innovative learning environment of studio to bring together educators and architects with African American students of architecture and design attending HBCUs. The Design Leadership Project (DLP) launched in 2008 with generous support from the Dean's Office and the Vice Provost's Office for Minority Affairs. The project brings faculty from architectural design programs around the country to teach one to four week mini projects or semester length design studios, participate in reviews, and give lectures. The DLP is a critical networking project. Its purpose is to open new channels of exchange that will bring academic and professional knowledge to the campuses of these important institutions and in turn, outside participants will learn of the rich history and from work done by students and faculty of these unique institutions of higher learning. With support of administrators at the schools, we have run two pilot collaborations with students and faculty from Tuskegee University in the fall of 2008 and Howard University spring 2010. Faculty from Howard and Tuskegee attended final project reviews at the GSAPP. And students from those programs have applied and been accepted into the Advanced Architectural Design and Graduate planning programs at the GSAPP. The future contribution of this project will be an important effort at bringing diverse perspectives and design approaches to the field of architecture. I have met with several deans and directors of the programs at the HBCU, along with enlisting support of educators from across the country. The president of the National Organization of Minority Architects (NOMA) Steven Lewis invited me to discuss this project with a select group of education and organizational representatives, including the AIA, at

NOMA's national convention in Boston (October 2010). My editorial on the DLP project was published in the ACSA newsletter (December 2009) and my perspectives on these issues appeared in an article "Breakthroughs and Obstacles: Architecture's Evolving Complexion" in the professional magazine Architectural Record (May 2009)." The initiative has beenvery successful and students from the HBCU's have become students at Columbia, along with other leading schools."

The proportion of Latino/Hispanic students remains a concern (although the statstics do not pick up the significant number of international students from Spanish-speaking countries) and the school has been developing strategies in this area. GSAPP again feels that its core strengths, in design, research, events etc must create the atmosphere that is supportive of potential students. To this end, the formation of the Latin Lab in the school, supporting a wide range of events, workshops, studios and conferences, plays a key role. The lab is equally devoted to Latino/Hispanic issues within the United States as in Latin America itself. Also the school has recently established a number of classes devoted to contemporary and historical Latin American Architecture. There are an increasing number of studios and major events devoted to Latin American countries and a large number of visiting lecturers by Latin American architects and architects working, for example, on cities on either side of the US/Mexico border, and predmoninantly Latino neighborhoods. Professors Clara Irazabel, Jorge Otero-Pailos, Galia Solomonoff, Juan Herreros, and Enrique Walker are playing an important leadership role in this major committment by the school.

Since the last accredittion, the School has created a growing network of global research labs. This leadership initiative to establish a set of "Studio X" facilities as key regional bases for the School is progressing steadily, with labs now open in Beijing, Amman, Mumbai, and Rio and the network is currently being completed with facilities in Istanbul, Moscow and Johannesburg. These international bases provide platforms for faculty to pursue research and engage in professional activities in a broad range of environments. They also open up the path for individuals from these countries to interact with our faculty and students and also bring people from those countries to Columbia. The School considers these facilities to be a resource for ongoing diversity efforts for both faculty and student recruitment.

2. Summary of Responses to Changes in the NAAB Conditions

The School believes that the changes in the NAAB conditions are clear and positive. While most of the changes address traditional strengths at the School, the School has taken the opportunity to review and refine certain practices.

In particular:

The addition of a section on **Long Range Planning** as the natural extension of program mission and the Five Perspectives is appreciated and reinforces all other sections of the APR.

The revisions to **Learning Culture and Social Equity** fostering a diverse, mutually supportive and respectful environment is likewise appreciated and resonates deeply with core values at GSAPP

The revisions to the **Responses to the Five Perspectives** section are again appreciated as helping to give a more holistic framework for the subsequent accounting of SPC areas. The new emphasis on academic "community" rather than "context" is welcomed as reinforcing the sense of architecture as an integral part of the University itself rather than simply occupying the University. The addition of "global world" and the "breadth of professional opportunities" to perspective B Architectural Education and Students resonates strongly with the increasingly international context and new modes of architectural practice. Likewise, with the emphasis on "practice in the global economy" in perspective D. Architecture and the Profession. The last perspective, Architectural Education in the Public Good is considered by GSAPP as the overarching perspective within which the other four take value, so more detail was offered there.

The addition of divisions on **Applied Research** and **Community and Social Responsibility** to the SPC are seen as very positive. Applied Research seems to directly support all five perspectives and needs to be a key dimension of professional training in such a rapidly changing world. Community and Social Responsibility likewise goes directly to perspective five on Architecture and the Public Good as a core goal.

The revision of the SPC to combine 2004 SPC 8 (Western Traditions) 9 (Non-Western Traditions) and 10 (National and Regional Traditions) into the single category **Historical Traditions and Global Culture** is regarded by GSAPP as a major and very important positive change. Being a traditional strength of GSAPP, and having had a non-Western requirement even before it was requirement by NAAB and a unique broadband dedication to the global context of architectural practice, the faculty now believe that achieving geographic and temporal diversity in the educational experience is more valuable than having isolated divisions of the curriculum as in the past and it appreciates NAAB's leadership in this key area.

The elevation of **Sustainability** from Understanding to Ability is welcomed as consistence with the central importance of resource responsibility in all aspects of contemporary professional practice.

The additional section on **Curriculum Review and Development** again seems to reinforce the overall holistic approach integrating Program Mission, Five Perspectives, and Long

Term Planning. For GSAPP, Curriculum Development is inseparable from Program Mission nd Long Term Planning.

On a more minor procedural level the revision to limit to 1-2 Criteria per required course does not seem possible and is inconsistent with the many overlaps between SPCs that are inevitable in a holistic approach.

Part Four (IV). Supplemental Information

I.4.1 Course Descriptions

A4003, Core Architecture Studio III, 9 credits

Course Description:
This studio consists of 3 consecutive design exercises of increasing scale and type. Initial exercises focus on analysis and representation while the final exercise covers the design and development of a housing and mixed-use building. All exercises focus on the development of architectural, design and representational principles.

Course Goals & Objectives:
- Students will learn how to conduct spatial and systems analysis
- Students will learn/invent drawing and diagramming techniques for representing their spatial and systems analysis
- Students will design at a variety of scales, from Micro to Macro
- Students will incorporate systems analysis into their architectural designs

Student Performance Criterion addressed:
A.2. Design Thinking Skills
A.5. Investigative Skills
A.7. Use of Precedents
A.8. Ordering Systems Skills
B.1. Pre-Design
B.2. Accessibility
B.3. Sustainability
B.4. Site Design
B.5. Life Safety
B.6. Comprehensive Design
C.1. Collaboration
C.9. Community and Social Responsibility

Topical Outline:
Research (10%)
Analysis (20%)
Design concepts and representational skills (70%)

Prerequisites:
A4002 Core Studio II

Textbooks/Learning Resources:
Richard Plunz. *A History of Housing in New York City*. (New York: Columbia University Press, 1990).
Alan Colquhoun. "Typology and Design Method," *Perspecta*, Vol. 12. (Cambridge: The MIT Press, 1969).

Offered:
Fall only; annually

Faculty assigned:
Hilary Sample (F/T)
and other faculty

A4002, Core Architecture Studio II, 9 credits

Course Description:
Students investigate relationships across public and private institutions by addressing the typology of the bank.

Course Goals & Objectives:
- Students will work intensively and prolifically through both digital and material exploration.
- Students will learn to propose their own program by addressing user needs.
- Students will become highly proficient in multiple research techniques.
- Students will engage in dynamic and active dialogue in order to achieve critical and effective design explorations, presentations, and physical models.

Student Performance Criterion addressed:
A.2. Design Thinking Skills
A.6. Fundamental Design Skills
A.7. Use of Precedents
B.1. Pre-Design
B.2. Accessibility
C.9. Community and Social Responsibility

Topical Outline:
Critical Thinking and Conceptualization (20%)
Constructive Research (20%)
Design (30%)
Representational Innovation (15%)
Participation (15%)

Prerequisites:
A4001 Core Architecture Studio I

Textbooks/Learning Resources:
Balmond, Cecil. *Informal,* 2002
Colomina, Beatriz. *Privacy and Publicity: Modern Architecture as Mass Media*, 1996
Corner, James, ed. *Recovering Landscape: Essays in Contemporary Architecture*, 1999

Offered:
Spring only; annually

Faculty assigned:
Amale Andraos (F/T)
And other faculty

A4001, Core Architecture Studio I, 9 credits

Course Description:
This studio consists of 3 consecutive design exercises of increasing scale. Initial exercises focus on analysis and representation while the final exercise covers the design of an institutional building. All exercised focus on introducing students to architectural, design and representational principles.

Course Goals & Objectives:
- Students will learn how to conduct spatial and systems analysis
- Students will learn/invent drawing and diagramming techniques for representing their spatial and systems analysis
- Students will design at a variety of scales, from Micro to Macro
- Students will incorporate systems analysis into their architectural designs

Student Performance Criterion addressed:
A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.6. Fundamental Design Skills
A.8. Ordering Systems Skills
A.11. Applied Research
B.4. Site Design

Topical Outline:
Research (10%)
Analysis (20%)
Design concepts and representational skills (70%)

Prerequisites:
None

Textbooks/Learning Resources:
Stan Allen, *Diagrams Matter* in *ANY* 23, pp. 16-23 (1998)
Robin Veder, *Color Gardens Before Color Photography*
Sergei Eisenstein, *The Film Sense*, pp. 175 (1942)
Kate Ascher, *The Works: Anatomy of a City*
Jacques Guillerme and Helene Verin, *The Archeology of Section*
Alejandro Zaera Polo, *The Politics of the Envelope*, Volume #17, Fall 2008

Offered:
Fall only; annually

Faculty assigned:
Galia Solomonoff (F/T)
and other faculty

A4004, Advanced Architecture Studio IV - C-BIP, 9 credits

Course Description:
The Columbia Building Intelligence Project (C-BIP) is an experimental collaborative studio with 30 students and 3 faculty that explores new design workflows through advanced digital design tools.

Course Goals & Objectives:
- Students learn how to work collaboratively by designing digital workflows to share design information with their peers.
- Students learn to use and develop advanced digital tools to study design options through metric based analysis. Topics of analysis include environmental, structural, material and cultural.

Student Performance Criterion addressed:
A.11. Applied Research
B.3. Sustainability

Topical Outline:
Software knowledge and development (20%)
Environmental Design (10%)
Integrated Design (15%)
Collaboration Skills (15%)
Formal and Material Design (30%)
Presentation skills (10%)

Prerequisites:
A4003 Core Architecture Studio III

Textbooks/Learning Resources:
Class Webpage / Blog with select articles and online resources:
http://cbiptech.ning.com/
http://c-bip.org/

Offered:
Spring only; annually

Faculty assigned:
David Benjamin (F/T)
Laura Kurgan (F/T)
Scott Marble (Adjunct)

A4004, Advanced Architecture Studio IV - What Does Green Mean?, 9 credits

Course Description:
This studio uses mock debate techniques to develop a design for a 100,000 square foot, public, conditioned leisure space along the Salt River in Phoenix, Arizona.

Course Goals & Objectives:
- Students will critically examine the ecological and political implications of their design.
- Students will learn to form clear and precise arguments about the intentions of their design work by adopting mock debate techniques, and form an understanding for competing or opposing positions from their own.
- Students will explore film-based forms of visual communication to express design ideas.
- Students will learn how to interpret and implement sustainable design techniques with an approach that is innovative and critical.

Student Performance Criterion addressed:
A.11. Applied Research
B.3. Sustainability

Topical Outline:
Research (35%)
Design Development through drawings and models (45%)
Presentation (20%)

Prerequisites:
A4003 Core Architecture Studio III

Textbooks/Learning Resources:
Giddens, Anthony, *The Politics of Climate Change* (Polity, 2009)
Ross, Andrew, *Bird on Fire: Lessons from the World's Least Sustainable City* (Oxford University Press, 2011)

Offered:
Spring only; 2012

Faculty assigned:
Janette Kim (Adjunct)

A4004, Advanced Architecture Studio IV - The Factory, 9 credits

Course Description:
This studio re-imagines the factory, setting out to understand the architect as a constructor of both buildings but also social, conceptual, and technical structures.

Course Goals & Objectives:
- Students will learn basic Geographic Information System Skills
- Students will learn the nature of an architectural program
- Students will look at precedents from the architectural past and present
- Students will explore forms of visual communication
- Students will investigate contemporary systems of industrial production
- Students will explore innovative forms of work and financing

Student Performance Criterion addressed:
A.11. Applied Research
B.3. Sustainability

Topical Outline:
Drawing, layout and other representational techniques (40%)
Design (40%)
Attendance and Participation (20%)

Prerequisites:
A4003 Core Architecture Studio III

Textbooks/Learning Resources:
Kenneth W. Griffin, *Building Type Basics for Transit Facilities* (New York: Wiley, 2004)

Offered:
Spring only; 2011

Faculty assigned:
Kazys Varnelis (Adjunct)

A4005, Materials Based Design Studio III, Near-Infrastructural Architecture, Advanced Studio, 6 credits.

Course Description:
Studio work explores material and design aspects of infrastructure and seeks to explore how architecture can expand its social land urban capabilities from the technical as well as financial investments in infrastructure.

Course Goals & Objectives:
Students work with design faculty as well as a structural and environmental engineer on weekly basis. The studio is the third Materials Based Design Studio is supported by a grant provided by Lafarge Group, Paris, in conjunction with the Columbia Conference on Architecture, Engineering and Materials Funding allows for an expanded studio faculty with specialties in structural and environmental engineering.

Student Performance Criterion addressed:
N/A

Topical Outline (include percentage of time in course spent in each subject area):
Drawing and other representational techniques (30%)
structural and environmental engineering (30%)
urban and infrastructural analysis and modeling (30%);
research and data analysis (10%)

Prerequisites:
A4004 Advanced Studio IV

Textbooks/Learning Resources:
Engineered Transparency, The Visual, Technical and Spatial Effects of Glass, edited by Michael Bell and Jeannie Kim; Solid States: Concrete in Transition, edited by Michael Bell and Craig Buckley

Offered (semester and year):
Fall 2012;

Faculty assigned
Michael Bell (F/T);
Zachary Kostura (adjunct);
Chad Konrad (adjunct);
Hyon Woo Chung (adjunct)

A4006, Materials Based Design Studio II, Infrastructural Architecture, Advanced Studio, 6 credits.

Course Description: Studio work was based in an analysis of the Houston Ship-Channel and the interrelationship of an industrial zone with a residential area. Students proposed a future redevelopment of the Navigation Boulevard area of the Ship Channel adjacent to Downtown Houston and attempted to build on the immense public investment in the Ship Channel as a form of urban redevelopment.

Course Goals & Objectives : Students work with design faculty as well as a structural and environmental engineer on weekly basis. The studio is the second of three Materials Based Design Studios and is supported by a grant provided by Vinyl Institute in conjunction with the Columbia Conference on Architecture, Engineering and Materials. Funding allows for an expanded studio faculty with specialties in structural and environmental engineering.

Topical Outline:
Drawing and other representational techniques (30%)
structural and environmental engineering (30%) urban and infrastructural analysis and modeling (30%); research and data analysis (10%)

Prerequisites:
Third Year Master of Architecture Standing; ADD Program

Textbooks/Learning Resources:
Engineered Transparency, The Visual, Technical and Spatial Effects of Glass, edited by Michael Bell and Jeannie Kim; Solid States: Concrete in Transition, edited by Michael Bell and Craig Buckley

Offered (semester and year):
Fall 2012; Spring 2012

Faculty assigned (list all faculty assigned during the four semesters prior to the visit):
Michael Bell (F/T)
Zachary Kostura (adjunct)
Chad Konrad (adjunct)

A4003, TRANSIT ORIENTED DEVELOPMENT & HOUSING, Core Studio III, 6 credits.

Course Description : The studio will propose new forms of housing that are simultaneously local in scale, yet designed with an awareness of urban, national, and international housing history. Particular attention will be given to regional and national commuting times which demonstrate the relationship between housing and infrastructure. These issues will inform studio work, as will the increasing global costs of energy use at all levels.

Course Goals & Objectives: The studio will explore the design of urban housing on the site of the Hoboken Terminal in relation to 1) Density, 2) Connectivity (to transportation infrastructure), and 3) The NY/NJ Waterfront. A new housing and transit structure will be proposed at the Hoboken Terminal in New Jersey, above the existing rail lines. This proposal will be in conjunction with major new developments in the NY/NJ Transit infrastructure.

Topical Outline:
Drawing and other representational techniques (20%)
urban and infrastructural analysis and modeling (20%); housing design and unit design (50%) research and data analysis (10%)

Prerequisites:
Core I, Core II design studios

Textbooks/Learning Resources:
Engineered Transparency, The Visual, Technical and Spatial Effects of Glass, edited by Michael Bell and Jeannie Kim; Solid States: Concrete in Transition, edited by Michael Bell and Craig Buckley

Offered (semester and year):
Fall 2012; Spring 2012

Faculty assigned:
Michael Bell (F/T); Karla Rothstein (adjunct), Scott Marble (adjunct), Robert Marino (adjunct), Laura Kurgan (adjunct), Ada Tolla and Giuseppe Lignano (adjunct), Charles Eldred (adjunct), Doulgas Gautheir (adjunct), Soo-In Yang (adjunct)

A4678, New Spaces of Housing, Seminar, 3 credits.

Course Description: Seminar focuses on historical and recent transformations in United States federal housing policy. A particular focus is the mid-1990's and the rise of HOPE VI as well as Low Income Housing Tax Credits and their effect on architectural design.

Course Goals & Objectives : Student research is supported by a series of weekly lectures by the professor: the seminar provides a background in major housing policy initiatives since the New Deal and demonstrates the scope and depth of change in policy as housing means shifted towards tax credit and other financial incentive techniques for affordable and low income housing. The course is open to planning, MSRED and architecture students.

Topical Outline:
Faculty lectures (65%); guest lectures from housing professionals (15%); student presentations and research (20%)

Prerequisites:
Open to any level GSAPP graduate program.

Textbooks/Learning Resources:
NA; research based in journal, articles and housing data or research.

Offered (semester and year):
Spring 2010; Spring 2009, Spring 2008, Spring 2007

Faculty assigned (list all faculty assigned during the four semesters prior to the visit):
Michael Bell (F/T); Peter Hence (adjunct)

A4005, Advanced Architecture Studio V: Far Places, 9 credits

Course Description:
This design studio explored the new frontier of architecture, computation, and synthetic biology, including new software workflows that allow non-specialists to begin designing with biology.

Course Goals & Objectives:
- Students will explore the intersection of architecture, computation, and synthetic biology.
- Students will use advanced software applications for automated optimization, multi-material structural analysis, and bacterial patterning simulation as part of a new design workflow.
- Students will apply new developments in biology to the design of new sustainable building materials, as well as the new buildings that these materials may create.
- Students will become fluent in designing at multiple scales simultaneously, from the scale of bacteria at 10^-5 meters to the scale of global flows of resources at 10^7 meters, and they will study the interdependencies between these scales.

Student Performance Criterion addressed:
A.11. Applied Research

Topical Outline:
Research (10%) Modeling
software (15%) Simulation
software (10%) Optimization
software (10%)
Drawings and representation (30%)
Presentation (25%)

Prerequisites:
None

Textbooks/Learning Resources:
N/A

Offered:
Fall only; annually

Faculty assigned:
David Benjamin (F/T)

A4005, Advanced Architecture Studio V, 9 credits

Course Description:
The studio explores formal, material and technological strategies related to a critique of modernist legacies such as brutalism and sculptural form set against a contemporary context.

Course Goals & Objectives:
- Students will develop their conceptual and critical abilities.
- Students will further refine their design skills and their ability to translate concepts into architectural proposals
- Students will further develop their skills relative to various techniques for 2D and 3D design and representation
- Students will research and gain a deeper understanding of relevant examples of historical precedence

Student Performance Criterion addressed:
A.3. Visual Communication Skills
A.11. Applied Research

Topical Outline:
Research, Analysis and Inspiration (25%)
Design and Development of concepts into architectural proposal (60%)
Communication and Presentation skills (15%)

Prerequisites:
A4004 Advanced Architecture Studio IV or A4853 Advanced Architecture Studio

Textbooks/Learning Resources:
Various texts relating to the work of Le Corbusier, Marcel Breuer, Eero Saarinen, Nicholas Ledoux, Peter Zumthor, OMA, Louis Kahn, Frank Lloyd Wright and Alvaro Siza, among others.

Offered:
Fall only; annually

Faculty assigned:
Lise Anne Couture (F/T)

A4005, Advanced Architecture Studio V, 9 credits

Course Description:
The Fall term combines third-year M.Arch students with second-semester AAD students. Participants develop an individual thesis within a position combining social responsibility, environmental building techniques, structural/building envelope assemblies and site. Themes and discussions center on client role, leadership, professional ethics and community responsibilities.

Course Goals & Objectives:
- Building Materials & Assemblies: Understanding of basic principles in the appropriate selection of construction materials, components and assemblies including environmental impact and visual performance.
- Building Systems: Understanding of basic integration of structural components, vertical transportation and building envelope assemblies, etc.
- Communication Skills: Development of communication techniques necessary to present conceptual themes and the evolution of these ideas into architectural

Student Performance Criterion addressed:
A.1. Communication Skills
B.9. Structural Systems
B.10. Building Envelope Systems
B.11. Building Service Systems
B.12. Building Materials and Assemblies

Topical Outline:
Thesis Research & Development (30%) Site
and Environmental Analysis (30%) Building
Design & Detail Development (30%)
Presentation Skills (10%)

Prerequisites:
A4004 Advanced Architecture Studio IV or A4853 Advanced Architecture Studio

Textbooks/Learning Resources:
Course handouts.
Instructional slide presentations & discussions led by instructor.
Foreign Travel with themed presentations by outside lecturers.

Offered:
Fall only; annually

Faculty assigned:
Leslie Gill (Adjunct)
Mike Jacobs (Adjunct)

A4005, Advanced Architecture Studio V – Speculating Speed, 9 credits

Course Description:
Given the challenge of the impending large-scale infrastructural construction with regard to political, social, economic and ecological issues; the studio design projects will anticipate the arrival of the California High Speed Rail (HSR) at specific sites/ stops proposing architectural scale proposals and programs beyond the mere accommodation of vehicular traffic.

Course Goals & Objectives:
- Students will analyze this complex and extra-large-scale physical environment looking at it from many trajectories: political, cultural, economic, historical, technological, geological and topographical
- Students will prioritized energy and sustainability goals
- Students will explore all forms of visual communication from freehand drawing through building information modeling software.
- Students will learn presentation skills to be used throughout their academic careers.

Student Performance Criterion addressed:
A.3. Visual Communication
B.3. Sustainability

Topical Outline:
Drawing and other representational techniques (60%)
Presentation skills (40%)

Prerequisites:
A4004 Advanced Architecture Studio IV or A4853 Advanced Architecture Studio

Textbooks/Learning Resources:
The Infrastructural City: Networked Ecologies in Los Angeles, (ed) Kasys Varnelis *(2008).*
Ecological Urbanism, (ed) Moshen Mostafavi and Gareth Doherty
Mostafavi, Mohsen; Doherty, Gareth (2010). Ecological Urbanism. Harvard University, Graduate School of Design: Lars Muller Publishers
Los Angeles, the Architecture of Four Ecologies, *Reyner Banham*
Banham, Reyner. (1971, 2001) Los Angeles, the Architecture of Four Ecologies. Berkeley and Los Angeles, CA: University of California Press
The Urban Revolution, Henri Lefebvre (1970), The Urban Revolution. Translated by Robert Bononno (2003), Minneapolis, MN: University of Minnesota Press

Offered:
Fall only; 2011

Faculty assigned:
Laurie Hawkinson (F/T)
Christian Uhl (Adjunct)

A4005, Advanced Architecture Studio V - Clima(X), 9 credits

Course Description:
Last week New York got hit first with an earthquake, and then with a Hurricane. The world climate is becoming more extreme, more unpredictable and scarier. This studio will investigate the opportunities for and limitations of extreme climates and environments on architecture.

Course Goals & Objectives:

- Students will propose a self contained and completely self sustained environment, a mini city of sorts for EACH of three sites: a lunar base, an arctic station, a deep sea oceanic site. These sites are extreme environments of political, ecological, and atmospheric nature. All three sites are territories in flux. All three sites are viable for human inhabitation.
- Students will be operating within rich histories of utopian speculation of human beings inhabiting the sea, space, and artic. Extreme climates are fast making technological, territorial, and environmental challenges common place in our world. The extreme environment is one in which all architects will soon have to operate.
- Students are expected to investigate what new technologies will bring to bear in extreme environments? How will biological life be sustained? How can existing ecologies be preserved by our invasive presence? What can architecture contribute to the already existing utopian speculations of life in extreme environments? The now defunct NASA Institute for Advanced Concepts, a think tank for science based far-out extreme environment concepts, had financed research such as: un-manned self replicating lunar factories, the space elevator, algorithmic based architectures for self-healing spacecraft, shape shifting spacesuits, and system architectures for self sustaining lunar colonies. What can we as architects imagine here?

Student Performance Criterion addressed:
B.3. Sustainability

Topical Outline:
N/A

Prerequisites:
A4004 Advanced Architecture Studio IV or A4853 Advanced Architecture Studio

Textbooks/Learning Resources:
None

Offered:
Fall only; annually

Faculty assigned:
Thomas Leeser (Adjunct)

A4005, Advanced Architecture Studio V, 9 credits

Course Description:
Projects, explored as urban infrastructures, re-frame how society processes the physical and emotional aspects of death, generating new sequences of civic and intimate territory.

Course Goals & Objectives:
- Critical Experimentation challenges certainty.
- Students are encouraged to push inquiry to failure.
- Concepts render new matrices, de-familiarizing expectations, opening new possibility.
- Scholarly and advanced research catalyze innovation.
- Active dialogue instigates critical and effective explorations, development, presentations, and reflection.

Student Performance Criterion addressed:
A.3. Visual Communication Skills
A.11. Applied Research

Topical Outline:
Critical Thinking and Conceptualization (20%)
Constructive Research (25%)
Design (30%)
Innovation / Risk (25%)

Prerequisites:
A4004 Advanced Architecture Studio IV or A4853 Advanced Architecture Studio

Textbooks/Learning Resources:
Appiah, Kwame Anthony, *The Honor Code: How Moral Revolutions Happen* (W.W. Norton & Co., 2010)
Burdett, Ricky and Deyan Sudjic, eds. *The Endless City: The Urban Age Project* (London School of Economics and Deutsche Bank's Alfred Herrhausen Society, 2008
Foucault, Michel. *Of Other Spaces* (1967), *Heterotopias*.
Harvey, David. *Spaces of Hope*, 2000
Kwinter, Sanford. *Requiem for the City at the End of the Millenium*, (Actar, 2010)
Lefebvre, Henri, *The Urban Revolution* (University of Minnesota, 2003)
Taylor, Mark C., *After God* (University of Chicago, 2007)
Vidler, Anthony. *The Architectural Uncanny* Essays in the Modern Unhomely (MIT Press, 1999)

Offered:
Fall only; annually

Faculty assigned:
Karla Rothstein (Adjunct)

A4005, Advanced Architecture Studio V, 9 credits

Course Description:
This Advanced Studio embraces Le Corbusier´s understanding that architecture is the practice of a gift above all**.** We will examine a great number of prototypes illustrating a so-called ‘`hedonistic” program in order to invent and shape an unprecedented prototype for the future**.**

Course Goals & Objectives:
- Students will explore their intuitive skills in developing both, the program and the physicality of the project.
- Students will learn presentation skills to be used throughout their academic careers.

Student Performance Criterion addressed:
B.1. Pre-Design

Topical Outline:
Reading (20%)
Drawing and other representational techniques (70%)
Presentation skills (10%)

Prerequisites:
A4004 Advanced Architecture Studio IV or A4853 Advanced Architecture Studio

Textbooks/Learning Resources:
Bataille, Georges. *The Accursed Share***.** New York, 1988, 3 vols.; *Visions of Excess.* Minneapolis, 1985.
Mauss, Marcel. *The Gift. The Form and reason of Exchange in Archaic Societies.* New York, 1990.
Nabokov, V. *The Gift.* Vintage Books, New York, 1991. Von Reden, S. *Exchange in Ancient Greece.* London, 1995.
Titmuss, Richard. *The Gift Relationship: From Human Blood to Social Policy.* London, 1971.
Vernant, Jean-Pierre, *Pandora, la première femme*, Paris, 2006.
Veyne, Paul. *Bread and Circuses.* Cambridge, MA 1995.

Offered:
Fall only; annually

Faculty assigned:
Yehuda E. Safran (Adjunct)

A4005, Advanced Architecture Studio V - Concept and Material, 9 credits

Course Description:
This studio seeks to examine the relation between material and concepts in architecture by revisiting an archetypal architectural narrative: The House of the Three Little Pigs.

Course Goals & Objectives:
- Students will analyze the concept, percept and affect (with an "a") in relation to a chosen material.
- Students will choose a program from a lottery and seek to address the following questions:
    - What is the Material (capital M) this building will be built of?
    - Alternatively, what are the two or three (max.) Materials the building is made of?
    - How do these building Materials reinforce the concept you have arrived at?
    - Does the Concept precede the Material(s), or the Material(s) precede the Concept?

Student Performance Criterion addressed:
B.12. Building Materials and Assemblies

Topical Outline:
Drawing and other representational techniques (60%)
Presentation skills (40%)

Prerequisites:
A4004 Advanced Architecture Studio IV or A4853 Advanced Architecture Studio

Textbooks/Learning Resources:
None

Offered:
Fall only; annually

Faculty assigned:
Bernard Tschumi (F/T)

A4005, Advanced Architecture Studio V, 9 credits

Course Description:
This advanced design studio researches the urbanization of cities in Africa; based on this research students develop architectural design propositions.

Course Goals & Objectives:
- Students develop their research skills by studying urban and architectural transformation of African cities.
- Students hone their representation skills.
- Students work in teams to develop presentations on various phases of research.

Student Performance Criteria addressed:
A.3. Visual Communication Skills
A.11. Applied Research

Topical Outline:
Representation skills (40%)
Presentation skills (20%)
Research skills (40%)

Prerequisites:
A4004 Advanced Architecture Studio IV or A4853 Advanced Architecture Studio

Textbooks/Learning Resources:
None

Offered:
Fall only; annually

Faculty assigned:
Mabel O. Wilson (F/T)

A4006, Advanced Architecture Studio VI – Parallel MoMA, 9 credits.

Course Description:
This architecture design studio will propose alternative models for a contemporary museum, based on the dynamic and evolving conditions that characterize large contemporary cities.

Course Goals & Objectives:

- You will use the Museum of Modern Art (MoMA) as a site for architectural invention, and a selection of urban conditions in Tokyo as analogous modes of exchange, production and communication.
- Various analogies are typically borrowed to describe or critique museums: yes to amusement park or laboratory; no to temple or mausoleum. In an effort to situate museums within a broader spectrum of real life, students will shift focus from unstable typology to dynamic city, seeking in the heterogeneous urban conditions of Tokyo analogous modes of exchange, production and communication.
- You will work in pairs to design a new MoMA on its existing 53rd Street site in New York City. Our working assumption is that student teams will be given the same competition brief as the three finalists for the 1997 MoMA expansion, with the unfair advantage of hindsight and a right to question the brief. You will be the hypothetical fourth finalist.

Student Performance Criteria addressed:
A.9. Historical Traditions and Global Culture

Topical Outline:
Design (60%)
Research (20%)
Presentations and Workshops (10%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
None

Offered:
Spring only; 2011.

Faculty assigned:
Eric Bunge (Adjunct)
Mimi Hoang (Adjunct)

A4006, Advanced Architecture Studio VI – Rio Super Hospital, 9 credits

Course Description:
This architecture design studio proposes alternative models for a contemporary hospital in Rio de Janeiro, reframed as a series of nested ecologies.

Course Goals & Objectives:
- Taking as a critical departure point the mega or 'super' hospital introduced in the 1950s, students will design a medium sized urban hospital that develops a new notion of 'super' as distinct from size or centralization.
- Ecological frameworks will be explored for conceptual and formal opportunities that inform a new strain of 'super' hospitals.
- After a brief period of individual work, students will work either individually or in pairs on one of three varied sites in Rio de Janeiro.

Student Performance Criteria addressed:
A.9. Historical Traditions and Global Culture

Topical Outline:
Design (60%)
Research (20%)
Presentations and Workshops (10%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
None

Offered:
Spring only; 2012

Faculty assigned:
Eric Bunge (Adjunct)
Mimi Hoang (Adjunct)

A4006, Advanced Architecture Studio VI, 9 credits

Course Description:
The design studio encourages students to apply new tools and technologies to the intensive development of an architectural design.

Course Goals & Objectives:
- Students develop a critical approach to technological acceleration and compelling narratives for the role of the environment in technology
- Students develop and broaden their understanding of technology's role in the conception, development and realization of the built environment.
- Students are able to articulate purposeful design statements that can be iterated via information technologies.
- Students learn and demonstrate facility with architectural technologies, especially rapid-prototyping, parametric design and programming.
- Students understand research methodologies and current advancements in industries beyond the building industry
- Students develop and fully document a sophisticated architectural proposal.
- Promote a vibrant and productive studio culture.

Student Performance Criterion addressed:
A.5. Investigative Skills
A.9. Historical Traditions and Global Culture
A.11. Applied Research
C.2. Human Behavior

Topical Outline:
Lectures (10%)
Programming Workshops (20%)
Travel/Site Visits/Interviews (15%)
Individual and Group Discussion (40%)
Reviews (15%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
Class Wiki (workshop materials, shared files)

Offered:
Spring only; annually

Faculty assigned:
Mark Collins (Adjunct)
Toru Hasegawa (Adjunct)

A4006, Advanced Architecture Studio VI, 9 credits

Course Description:
Develop a master planning methodology and an informed built environment for a new high density neighborhood, promoting a new ideology through methods of architectural propaganda.

Course Goals & Objectives:
- Students will explore all forms of visual communication from freehand drawing through building information modeling software.
- Students will learn presentation skills to be used throughout their academic careers.
- Students will develop spatial, economic, social, technological and cultural strategies in support of new or existing urban dwellings.

Student Performance Criteria addressed:
A.1. Communication Skills.
A.3. Visual Communication Skills
A.9. Historical Traditions and Global Culture
B.7. Financial Considerations

Topical Outline:
Drawing and other representational techniques (60%)
Presentation skills (40%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
Bonnell, Victoria. *Iconography of Power: Soviet Political Posters under Lenin and Stalin*. Berkeley, Los Angeles, and London: University of California Press, 1997
Bowlt, John E., ed. *Russian Art of the Avant-Garde: Theory and Criticism*. New York: Thames and Hudson, 1988
Bown, Matthew Cullerne. *Contemporary Russian Art*. Somerset: Phaidon Press Limited, 1989
Bown, Matthew Cullerne, and Brandon Taylor, eds. *Art of the Soviets: Painting, Sculpture, and Architecture in a One-Party State, 1917–1992*. Manchester: Manchester University Press, 1993
The Great Utopia. New York: Solomon R. Guggenheim Museum, 1992
Groys, Boris. *The Total Art of Stalinism: Avant-Garde, Aesthetic Dictatorship and Beyond*. Princeton: Princeton University Press, 1988
Tarkhanov, Aleksei, and Sergei Kavtaradze. *Architecture of the Stalin Era*. New York: Rizzoli, 1992

Offered:
Fall only; annually

Faculty assigned:
Markus Dochantschi (Adjunct)

A4006, Advanced Architecture Studio VI – A New University, 9 credits

Course Description:
The central question that our Architectural Studio explored is: If we were constructing a new university campus from scratch that was destined to become one of the great seats of learning, would the new institutions be organized differently and would we create dramatically different types of physical spaces.

Students were asked to create physical environments that depart significantly from the old model that has been in place for several hundred years in the U.S. and for far longer in Europe.

Course Goals & Objectives:
- Their assignment was not necessarily to complete an entire new design for a great university, but rather to provide a concept for a new campus and design the evidence for how it might diverge from the previous models
- Students chose to focus on part of a campus or a type of building as illustrative of what might constitute this new building type.
- Students will prioritized energy and sustainability goals
- Students will explore all forms of visual communication from freehand drawing
- to building information modeling software.
- Students will learn presentation skills to be used throughout their academic work and careers.

Student Performance Criterion addressed:
A. 9. Historical Traditions and Global Culture

Topical Outline:
Drawing and other representational techniques (60%)
Presentation skills (40%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
Jonathan R. Cole, *The Great American University: Its Rise to Preeminence, Its Indispensable National Role, Why We Must Protect It*. (New York: Public Affairs, 2011)
Andrew Ross, *Bird on Fire: Lessons from the World's Least Sustainable City*. (Oxford University Press, USA; First edition November 3, 2011)

Applied Sciences NYC RFEI, NYCEDC, December 2010
http://66.228.35.41/AppliedSciencesNYC/AppliedSciencesRFP_low_2011-07-19.pdf
Cornell Technion Israel – Institute NY Times
http://www.nytimes.com/2011/12/26/education/in-cornell-deal-for-roosevelt-island-campus-an-unlikely-partnership.html?_r=1&pagewanted=all

Offered:
Spring only; 2012

Faculty assigned:
Laurie Hawkinson, (F/T, tenured)
Christian Uhl (Adjunct)
Jonathan R. Cole, University Provost 1989-2003, John Mitchell Mason Professor of the University

A4006, Advanced Architecture Studio VI, 9 credits

Course Description:
Investigation project that intends to research the techniques –models and methods– of thinking and developing large urban sites to re-locate the gravity centers of cities.

Course Goals & Objectives:
- To offer a program that seeks to assume that spare time activities can be more participatory rather than solely of passive consumption.
- To imagine a certain size of infrastructures for neighborhoods of between 100,000 to 250,000 inhabitants with a sphere of influence of 150,000 up to 500,000 inhabitants.
- To design buildings that absorb all necessary features to insert complex programs in the urban fabric, inscribed of a unique character and completed with a big portion of public space and facilities.
- To mix innovation and sufficient experience.

Student Performance Criterion addressed:
A.9. Historical Traditions and Global Culture

Topical Outline:
Diagraming, Drawing and other representational techniques (50%)
Invention of concepts (20%)
Use of representation and presentation tools (15%)
Building models and unusual formats (15%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
Depending of the location. Students grow their own reference authors and books with the direct help of the instructor. Some special classes bring examples and experiments useful for the students.

Offered:
Spring only; annually

Faculty assigned:
Juan Herreros (P/T)
Urtzi Grau (Adjunct)
Soo-In Yang, TA. 2010
Joaquim Moreno, TA. 2009

A4006, Advanced Architecture Studio VI - Megablock, 9 credits

Course Description:
The studio asks how can the 'Megablock' provide an alternative sustainable prototype for accommodating the growth of the city as well as the preservation and cultivation of agricultural land?

Course Goals & Objectives:
- The students are introduced to the history of the 'block', globally and specifically in China, through precedents studies. They are able to draw on the wide range of precedents as they consider their own solutions throughout the semester.
- The students consider the basic living unit and learn about human habitation and scale.
- The students learn how to aggregate the unit across the site to create urban density.
- The students learn how to analyze a site, the surrounding neighborhood, and the superblock block type. This teaches the students to understand context and how it can influence their design.

Student Performance Criterion addressed:
A.9. Historical Traditions and Global Culture
B.3. Sustainability

Topical Outline:
Research (10%) Design
(50%) Presentation skills
(30%) Class discussion
(10%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
Ferre, Albert and Tihamer Salij (eds.). *Total Housing: Alternatives to Urban Sprawl* (Barcelona: Actar, 2010).
Mass, Winy, Jacob van Rijs with Richard Koek. *FARMAX: Excursions on Density* (Rotterdam: 010 Publishers, 1998).
Campanella, Thomas J.. *The Concrete Dragon: China's Urban Revolution and what it means for the World* (New York: Princeton Architectural Press, 2008)
Jin, Wu, "The Historical Development of Chinese Urban Morphology," *Planning Perspectives, 8* (1993), pp 20-52.
Zhu, Jianfei, *Architecture of Modern China: a historical critique* (London; New York : Routledge, 2009)
Bray, David. *Social Space and Governance in Urban China: The Danwei System from Origin to Reform* (Stanford, USA: Stanford University Press, 2005)

Offered:
Fall only; annually

Faculty assigned:
Jeffrey Johnson (Adjunct)

A4006, Advanced Architecture Studio VI – The City of Mobile Services, 9 credits

Course Description:
The studio will explore the possibilities of reconnecting unused transportation infrastructure in New York City in order to create new ties to the city's larger urban and social framework.

Course Goals & Objectives:
- Students will investigate the intersection between architecture and transportation in the New York City. They will make proposals which reflect the future of mobility and how it will shape future cities.
- Students will focus on architecture as a communication tool as a means to hone their ability to speak to future clients and the public.
- Students will research and gain an understanding of architecture's role in the social media landscape.

Student Performance Criterion addressed:
A. 9. Historical Traditions and Global Culture

Topical Outline:
City Zoning/ Precedent Research (20%)
New Digital Representational Techniques (40%)
Architecture/Social media (15%)
Creative Presentation Model Building Techniques (10%)
Presentation Skills (15%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
N/A

Offered:
Spring only; annually

Faculty assigned:
Marc Kushner
Juergen Mayer H.

A4006, Advanced Architecture Studio VI - Knowledge City-Deployable Architecture, 9 credits

Course Description:
Jordan Short Film Festival. An exploration of the influence of new technology on public spaces. How does architecture integrate the notion of the Event.

Course Goals & Objectives:
- Analysis of the relation between new technologies and architecture
- Analysis of the relation between New technologies and Public spaces
- Design of a park and a deployable projection apparatus.

Student Performance Criterion addressed:
A.9. Historical Traditions and Global Culture

Topical Outline:
New technologies and Architecture analysis (20%)
Project design (80%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/LearningResources:
Henry Bergson , *Matter and Memory*, 1896
Robert Venturi, *Learning from Las Vegas,* 1972
Marshal Mc Luhan, *Understanding Media- the extension of Man,* 1964

Offered:
Spring only; annually

Faculty assigned:
Frederic Levrat (Adjunct)

A4006, Advanced Architecture Studio VI – Wild Mumbai, 9 credits

Course Description:
This studio explores the socio-ecological landscapes of Mumbai focusing on six sites: the Wetland, the National Park, the Beach, the Maidan, the Private Park and the Slum.

Course Goals & Objectives:
- Students will explore all forms of visual communication from photography through building information modeling software and will learn complex site analytic skills.
- Students will learn design and presentation skills.

Student Performance Criterion addressed:
A. 9. Historical Traditions and Global Culture

Topical Outline:
Research and site/program analysis (50%)
Design and Presentation skills (50%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
None

Offered:
Spring; 2012

Faculty assigned:
Lindy Roy

A4006, Advanced Architecture Studio VI – Monograph Studio, 9 credits

Course Description:
The studio focuses on the production of individual Monographs. The project is both the book and the architecture work included (all produced during studio)

Course Goals & Objectives:
- Students generate a very large volume of work, rapidly. They develop five new projects during the first half of the semester
- Students study, edit, and transform this work during the second half of the semester through the design and production of the book, their Monograph

Student Performance Criterion addressed:
A. 9. Historical Traditions and Global Culture

Topical Outline:
Projects (70%)
Book (30%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
Fuller, Buckminster. *I seem to be a verb* (Bantam Books, 1970)
Neutelings Riedijk Architects. *At Work* (010 Publishers, 2006)
Liebeskind, Daniel. *Chamber Works* (AA, 2008)
Diller and Scofidio. *Hard Pressed*
Eijkelboom, Hans. *Paris-New York-Shanghai* (Aperture, 2007)
Whitney, Liebmann, Pandiscio. *David Salle 1979-1994* (Rizzoli, 1994)

Offered:
Spring only; annually

Faculty assigned:
Ada Tolla (Adjunct Professor) Giuseppe Lignano (Adjunct Professor) Thomas de Monchaux (Teaching Assistant)

A4006, Advanced Architecture Studio VI - Double Dip: Post-Crisis Urbanism and Architecture, 9 credits

Course Description:
Sites in the Dominican Republic were used to investigate the potential of the post-crisis condition through research and masterplanning and architectural interventions.

Course Goals & Objectives:
- Students will learn how to develop independent narratives within larger research topics.
- Students will learn how to use research to develop architectural and urban designs.
- Students will learn how to design on a variety of scales, including masterplanning and architectural.
- Students will learn presentation skills to be used throughout their careers.

Student Performance Criteria addressed:
A.1. Communication Skills
A.9. Historical Traditions and Global Culture

Topical Outline:
Research (30%)
Masterplanning (25%)
Architectural Design (45%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
None

Offered:
Spring; 2011

Faculty assigned:
Shohei Shigematsu (Adjunct)
Christy Cheng (Adjunct)

A4006, Advanced Architecture Studio VI - Re-Run: Olympics Media and Broadcast Centre, 9 credits

Course Description:
An IBC/MPC for the Tokyo 2020 Olympics bid was taken as the framework through which to investigate architectural, programmatic, and urban issues through research and design.

Course Goals & Objectives:
- Students will learn how to develop independent narratives within larger research topics.
- Students will learn how to use research to develop architectural and urban designs.
- Students will learn how to design on a variety of scales, including masterplanning and architectural.
- Students will learn presentation skills to be used throughout their careers.

Student Performance Criteria addressed:
A.1. Communication Skills
A.9. Historical Traditions and Global Culture

Topical Outline:
Research (30%)
Masterplanning (25%)
Architectural Design (45%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
None

Offered:
Spring; 2012

Faculty assigned:
Shohei Shigematsu (Adjunct)
Christy Cheng (Adjunct)

A4006, Advanced Architecture Studio VI – The City of Mobile Services, 9 credits

Course Description:
Through a series of case studies, site visits, and design challenges, we will explore *the city of mobile services*, in order to add to it through proposals of our own.

Course Goals & Objectives:
- Students will explore forms of visual communication from freehand drawing through software and physical modeling.
- Through field trips and class visitors, students will learn how to perform original urban research and incorporate the findings into their design.
- Students will learn valuable presentation skills, including writing skills and oral presentation.
- Students will learn how to analyze the design of their mobile service in terms of the urban landscape, through discussions of the ways in which mobility can disrupt and reformulate the city's fixed geography, its socio-economic hierarchy, and/or the politics of its public space.

Student Performance Criterion addressed:
A. 9. Historical Traditions and Global Culture

Topical Outline:
Drawing, modeling, and other representational techniques (50%)
Urban Research (25%)
Presentation skills and class discussion(25%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
C-LAB and Studio-X NYC. *Experiments in Motion* (e-book. 2011)

Offered:
Spring; 2012

Faculty assigned:
Geoff Manaugh
Nicola Twilley

A4006, Advanced Architecture Studio VI – Received Ideas, 9 credits

Course Description:
This studio examines and employs *received ideas*—i.e ideas that have been depleted of their original intensity due to recurrent use—in contemporary architecture culture.

Course Goals & Objectives:
- To detect, define and date *received ideas* prevalent over the past decade, in particular design operations and conceptual strategies.
- To use—as well as misuse—*received ideas* towards the formulation of alternative design operations and alternative conceptual strategies.

Student Performance Criterion addressed:
A. 9. Historical Traditions and Global Culture

Topical Outline:
Research (20%)
Design (80%)

Prerequisites:
A4005 Advanced Architecture Studio V

Textbooks/Learning Resources:
Gustave Flaubert, "The Dictionary of Received Ideas," in Gustave Flaubert, *Bouvard and Pécuchet*, translated from the French by Mark Polizzotti, (Normal, IL: Dalkey Archive Press, 2005).

Offered:
Spring; 2012

Faculty assigned:
Enrique Walker

A4006, Advanced Architecture Studio VI – Collecting Architecture – Territories, 9 credits

Course Description:
Oriented around research travel to Greece and culminating in an exhibition at the Deste Foundation in Athens, the *Collecting Architecture –Territories* studio approached architecture both as an agent that organizes, supports, and informs contemporary collecting practices, and as an object of collection in its own right.

Course Goals & Objectives:
- To develop original architectural analysis of Athens, Greece, and the EU through collecting, and to explore the potential of collecting as an organizational device and as a design strategy for contemporary architecture.
- To deploy the architecture and urban design of Athens in its contemporary political condition, together with collecting in its current institutional, social and economic senses, to prompt forms of architecture that are active protagonists in collecting practices at institutional, urban and even meta-state levels.

Student Performance Criterion addressed:
A. 9. Historical Traditions and Global Culture

Topical Outline:
Group discussions, pin-ups and design reviews (35%)
Desk crits and individual discussion (55%)
Invited speakers and presentations (10%)

Prerequisites:
A4005 Advanced Architecture Studio V
Textbooks/Learning Resources:
Joint sessions with tandem seminar
Distributed essays and readings on collecting practices
Course blog/ discussion
Guest lectures by architects, journalists and political scientists
Research travel to Athens March 2012

Offered:
Spring; 2012

Faculty:
Mark Wasiuta

A4023, Architectural Drawing and Representation, 3 credits

Course Description:
Students will explore the concepts, techniques, and working methods of computer aided 'drawing' in architecture.

Course Goals & Objectives:

- Students study the operative relationship between 2d and 3d data, exploring the reaches of their analytic and representational potential.
- Students investigate tools to further the analytic and representational capacity of the data within the digital model. Studies will be in the form of drawings, physical models, images, and animations

Student Performance Criterion addressed:
A.3. Visual Communication Skills

Topical Outline:
2D and 3D digital drawing technique (40%)
Parametrics (15%)
Fabrication (15%)
Representation/Analysis Technique (30%)

Prerequisites:
None

Textbooks/Learning Resources:
http://adr-gsapp-2011.ning.com/ (course website)
Architectural Geometry by Helmut Pottmann, Andreas Asperl, Michael Hofer, Alex Kilian
Digital Lighting and Rendering by Jeremy Birn
Inside Rhinoceros 4 by Ron K.C. Cheng

Offered:
Fall only; annually

Faculty assigned:
Joshua Uhl, AIA (Adjunct)
David Fano (Adjunct)

A4024, Architectural Drawing and Representation II, 3 credits

Course Description: This course explores how traditional drawing concerns aid the development of a drawing sensibility in a digital environment through weekly drawing exercises and pin-up critiques.

Course Goals & Objectives:

- Students will learn the history and theory behind the geometric and aesthetic dimensions of architectural representation.
- Students will learn to critically investigate the relations between traditional and contemporary modes of architectural representation.
- Students will develop presentation skills in verbally explaining their intent.
- Students will develop critical skills in discussion of the work of their peers.

Student Performance Criteria addressed:
A.3. Visual Communication Skills
A.8. Ordering Systems Skills

Topical Outline:
Drawing and other representational techniques (70%)
Presentation skills (30%)

Prerequisites:
A4023 Architectural Drawing and Representation I

Textbooks/Learning Resources:
Weekly Assigned Readings

Offered:
Spring only; annually

Faculty assigned:
Michael Young (Adjunct)
Babak Bryan (Adjunct)
Kutan Ayata (Adjunct)
Frank Gesauldi (Adjunct)
Jennifer Leung (Adjunct)
Jonathan Morrison (Adjunct)
Bryan Young (Adjunct)
Kelly Wilson (Adjunct)

A4033, CCCPArch Colloquium II: Contemporary Critical Discourse, 3 credits

Course Description:
The seminar investigates contemporary critical discourse in architecture, surveying a range of methodologies and approaches that have defined, demarcated, or redirected the stakes of the discipline over the last four decades.

Course Goals & Objectives:

- Expand our familiarity with contemporary debates and to provide a focused forum for ongoing discussion regarding the articulation of new sites and strategies for research, writing, and practice.

Student Performance Criterion addressed:
N/A

Topical Outline:
Discussion of weekly readings–70%
Discussion and presentation of student research–30%

Prerequisites:
A4032 CCCPArch Colloquium I

Textbooks/Learning Resources:
Weekly readings on Courseworks

Offered:
Spring 2010, Spring 2011, now annually

Faculty:
Mark Wasiuta (Adjunct)

A4111, Architectural Technology I, 3 credits

Course Description:
This course is the first in the Architectural Science and Technology series. The subtopic of the course is “matter”; the content deals with the fundamental scientific, technological, professional and conceptual foundations with which architecture engages the material world.

Course Goals & Objectives:
- Students will explore the theoretical foundations of structural mechanics
- Students will explore the theoretical foundations of thermodynamics
- Students will explore the theoretical foundations of environmental parameters
- Students will explore the theoretical foundations of material science
- Students will learn how to calculate basic structural systems manually and through computational procedures.
- Students will learn how to calculate basic building thermal gain manually and through computational procedures.
- Students will learn how to calculate basic wind, gravity, lateral and environmental loading manually and through computational procedures.
- Students will learn how to draw technical plans, sections and elevations
- Students will learn how to research materials and methods
- Students will learn how to develop a building façade through drawing, outline specifications, 3D modeling, material samples and full scale mock-ups.

Student Performance Criteria addressed:
A.4. Technical Documentation
B.10. Building Envelope Systems
B.12. Building Materials and Assemblies

Topical Outline:
Structures (30%)
Thermodynamics and Environmental Parameters (20%)
Calculation and Drawing (50%)

Prerequisites:
None

Textbooks/Learning Resources:
None

Offered:
Fall only; annually

Faculty assigned:
Phillip Anzalone, AIA (F/T)

A4112, Architectural Technology II, 3 credits

Course Description:
This course addresses the fundamentals and application of environmental control systems in buildings.

Course Goals & Objectives:
- Heating, cooling, ventilation, lighting, and acoustics are discussed based on the physical laws that govern the exchange of energy between building and environment and how they relate to human comfort.
- Electrical, plumbing, fire protection and circulation are introduced in this context as required systems to make buildings fit for occupation.
- The goal of this course is to enable students to understand the interaction of natural and constructed environments in order to develop and quantify appropriate responses that create comfortable and efficient buildings.
- Students will learn how to manipulate this relationship through building form and orientation, construction and materiality, and mechanical, electrical and hydronic systems.
- Students will be able to understand the impact of their design decisions on building performance.

Student Performance Criteria addressed:
B.3. Sustainability
B.8. Environmental Systems
B.10. Building Envelope Systems

Topical Outline:
Passive Design Principles (20%)
Mechanical System Design (40%)
Energy Systems and Context (15%)
Energy Simulation skills (5%)
Fundamentals of lighting and daylighting (10%)
Lighting Simulation skills (5%)
Other systems (5%)

Prerequisites:
A4111 Architectural Technology I

Textbooks/Learning Resources:
Lechner, Norbert. *Heating Cooling Lighting. Design Methods for Architects* (Wiley. 2000)
Stein and Reynolds. *Mechanical and Electrical Equipment for Buildings* (Wiley. 2005)
Daniels, Klaus. *The Technology of Ecological Building: The Fundamentals and Approaches, Examples and Ideas* (Birkhäuser Basel. 1997)

Offered:
Spring only; annually

Faculty assigned:
Phillip Anzalone (F/T)
Nico Kienzl (Adjunct)
Junko Nakagawa (Adjunct)

A4113, Architectural Technology III, 3 credits

Course Description:
This course covers an advanced-level study of structural systems to support students early in the design. It establishes complex three dimensional ways to support spaces.

Course Goals & Objectives:

- The goal of this course is to enable students to understand the available variety of structural systems and how they can be applied to support their architectural designs, visualize the force- flow through building volumes as an opportunity to use new materials and software as an available part of their technology tool box in design.
- The teaching material will enable the student to establish suitable structural systems for various Architectural building types and artistic visions, based on fundamental principles and contemporary case study examples that go beyond well- known standard systems and allow room for plurality. Expression and placement of structure shall be understood not as a distant necessity during construction and building approval process, but as a rich opportunity to develop integrated design solutions, where structural members underline the overall expression of architectural context.
- Introduction to Advanced Structures, Loading-Force Flow, Stresses-Deflections, Bending-Beam-Slab-Cantilever, Vertical elements-Columns-Walls-Foundations, Lateral Systems-Bracing-Frame-Diaphragm, Folding, Formfinding-Membranes- Fabric Structures, Pneumatic Bubbles, Cables-Tensegrity Systems, Shell Structures-Arches-Domes

Student Performance Criteria addressed:
A.11. Applied Research
B.9. Structural Systems

Topical Outline:
Exposure to structural engineering principles and advanced systems lectures (50%)
Structural Calculations (30%)
Presentation skills (20%)

Prerequisites:
A4111 Architectural Technology I

Textbooks/Learning Resources:
None, reference literature will be suggested during class

Offered:
Fall semester only; annually

Faculty assigned:
Phillip Anzalone (Adjunct)
Will Laufs (Adjunct)

A4114, Architectural Technology IV, 3 credits

Course Description:
Working in teams in a studio setting and using construction drawings as the primary source of information, students analyze exceptional post WW II buildings with the aim of understanding structural, environmental, and enclosure systems, their interrelationships, and impact on architectural form.

Course Goals & Objectives:
- Understand the structural systems method of support and the reasoning behind the system and material selection.
- Understand the environmental control system type, method of achieving indoor comfort and reasoning behind the system selection.
- Understand construction of the exterior enclosure system, its method of managing of exterior environmental conditions and the reasoning behind the system selection.
- Understand the interrelationship between the buildings systems and the buildings overarching architectural intention.

Student Performance Criteria addressed:
B.9. Structural Systems
C.1. Collaboration

Topical Outline:
Final review (55%) Final exam (20%) Technical Report (15%) Class participation (10%)

Prerequisites:
A4112 Architectural Technology II

Textbooks/Learning Resources:
None

Offered:
Fall only; annually

Faculty assigned:
A. Jay Hibbs, RA, AIA, LEED AP (Adjunct)
David Wallance, AIA (Adjunct)
Roster of architectural critics

A4115, Architectural Technology V, 3 credits

Course Description:
Working in teams in a studio setting, students design a multi-story light industrial loft building with the aim of synthesizing structural, environmental, and enclosure systems into a coherent expression of an architectural intention.

Course Goals & Objectives:
- Design and detail a structural system, and quantitatively analyze key elements.
- Design and detail an enclosure system that expresses a conscious architectural intention, and quantitatively analyze key elements.
- Design an environmental system and size key components.
- Integrate systems to achieve spatial and expressive synergies.
- Utilize sustainable design strategies and optimize energy performance.

Student Performance Criteria addressed:
A.4. Technical Documentation
B.1. Pre-Design
B.3. Sustainability
B.5. Life Safety
B.6. Comprehensive Design
B.8. Environmental Systems
B.9. Structural Systems
B.10. Building Envelope Systems
B.11. Building Service Systems
B.12. Building Materials and Assemblies
C.1. Collaboration

Topical Outline:
Final review (70%)
Technical Report (20%)
Class participation (10%)

Prerequisites:
A4114 Architectural Technology IV

Textbooks/Learning Resources:
Course Reader

Offered:
Spring only; annually

Faculty assigned:
Philip Anzalone, AIA (Adjunct)
A. Jay Hibbs, AIA (Adjunct)
David Wallance, AIA (Adjunct)
Scott Hughes (Adjunct)
Robert Condon (Adjunct)
Kevin Lichten (Adjunct)
Roster of architectural, structural, and mechanical engineering critics

A4118, Exalted Structure, 3 credits

Course Description:
Study of the contemporary building environment, including modern materials, analytical methods and construction techniques. Examples of building systems from the 20th and 21st Century where the building form and aesthetic involve, and are many cases, driven by the chosen structural form.

Course Goals & Objectives:
- Students will critically assess structural forms ranging from fundamental to novel.
- Students will determine the drivers for the selected form, and explore how these forms reflect our collective definition of structural efficiency.
- Through individual and group work, students will establish the behavior of structural forms analytically through first principles and computational analysis.

Student Performance Criterion addressed:
B.9. Structural Systems

Topical Outline:
Analytical technique (60%)
Presentation skills (40%)

Prerequisites:
None

Textbooks/Learning Resources:
Mainstone, R. J. (Rowland J.). *Developments in structural form* (Oxford, England; Boston : Architectural Press, 1998)

Offered:
Fall only; annually

Faculty assigned:
Zachary Kostura (Adjunct)

A4141, Beyond Prototype, 1.5 credits

Course Description:
This course focuses on the digital generation and physical prototyping of parametric, folded meshes which assimilate both structure and building envelope into one hybridized system.

Course Goals & Objectives:
- Students will explore parametric design software to generate a building component system from complex cellular networks and extract data from the digital environment for fabrication.
- Students will employ digital modeling and physical prototypes to test design propositions and fabrication strategies.
- Each student will become proficient in the use of the CNC mill, metal break and plastic bender for fabrication of folded meshes from conventional sheet stock.
- Students will construct full scale prototypes of their building component systems to test design viability and assembly techniques.

.

Student Performance Criteria addressed:
A.4. Technical Documentation
A.8. Ordering Systems Skills
B.12. Builing Materials and Assemblies

Topical Outline:
Concept Development (10%)
Digital Generation / Parametric Modeling Skills (25%)
Analogue Modeling / Physical Prototyping (30%)
Component Fabrication Strategy (15%)
Presentation of Digital Design and Component Assembly Process (20%)

Prerequisites:
None

Textbooks/Learning Resources:
AEDS Ammar Eloueini, *CoReFab,* (ORO 2007)
Aranda, Benjamin & Chris Lasch, *Pamphlet Architecture 27: Tooling*, (Princeton Architectural Press 2006)
El-Khoury, Rodolphe & Oscar Riera Ojeda, *Office da*, (Rockport Publishers 2000)
Vyzoviti, Sophia, *Folding Architecture: Spatial, Structural and Organizational Diagrams*, (Gingko Press Inc. 2007)
Vyzoviti, Sophia, *Supersurfaces: Folding as a Method of Generating Forms for Architecture*, (Gingko Press Inc. 2006)

Offered
Spring only; annually

Faculty assigned:
Jason Ivaliotis (Adjunct Assistant Professor of Architecture)

A4330, Urban History I: Configurations of the City from Antiquity to the Enlightenment, 3 credits

Course Description:
This course traces the development of the European city from Antiquity to 1800. Focussing on the configuration of architecture in urban space, we follow the evolution of the city through a series of exchanges between typological, morphological and topographical factors.

Goals and Objectives:
- A midterm research topic, with bibliography of primary and secondary sources
- A final research paper, combining close formal analysis of the city and its architecture with critical use of period textual sources
- Both assignments demonstrate an ability to analyze and compare urban strategies in relation to architecture

Student Performance Criterion addressed:
A.1. Communication Skills
A. 9. Historical Traditions and Global Culture

Topical Outline:
Research and Writing (75%)
Readings (25%)

Prerequisites:
None

Textbooks/Learning Resources:
A. E. J. Morris, *History of Urban Form Before the Industrial Revolutions* (Wiley, 1979).
M. Tafuri, *Architecture and Utopia* (MIT Press, 1976).

Offered:
Springonly; annually

Faculty Assigned:
Dr Daniel Sherer, (Adjunct)

A4332, European Urbanism and Cartography, 3 credits

Course Description:
This course takes cartography as a point of departure for understanding the major changes in European cities in the Early Modern Period (16th - 18th centuries). It examines how maps document their built environment and function as carriers of deeper scientific, political and rhetorical meanings. We will be studying a very exciting period of urban, political, and scientific expansion. One that in many ways set the stage for mapping and planning in the 21st century.

Course Goals & Objectives:
- Producing graduate level research paper
- Honing critical reading skills
- Making history relevant to current practice

Student Performance Criterion addressed:
A.1. Communication Skills
A. 9. Historical Traditions and Global Culture

Topical Outline
Reading Responses (20%)
Paper - 10 pages (50%)
Seminar Group Presentation (30%)

Prerequisites
A4348 History of Architecture I
A4349 History of Architecture II

Textbooks/Learning Resourses
All articles available on *Courseworks*
Additional reading on reference shelf in Avery

Offered
Spring only; 2012

Faculty assigned:
Victoria Sanger (Adjunct)

A4344, Traditional Japanese Architecture, 3 credits

Course Description:
This course introduces classic Japanese ethics and aesthetics related to built environment; a woven organism of values and practices. We will examines what they have quested for centuries, through lectures, readings, discussions, and formal analysis.

Course Goals and Objective:
- Students will aware non-western way of seeing, thinking and making.
- Students will understand the world where feeling is more esteemed than reasoning.
- Students will get basic knowledge of traditional Japanese architecture; building types, construction method, materials, measurement and module, sustainability, carpenters institution(succession and improvement of technology and craftsmanship), modern and contemporary application of tradition.

Student Performance Criteria addressed:
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity

Topical Outlines:
Historical and geographical boundary of Japanese architecture (10%)
Measure buildings and types(10%)
Measurement and module(Tatami and Kiwari) (10%)
Materials and construction method (10%)
Tree culture: aesthetics and ethics of tree(10%)
Daiku and their tools(10%)
Research, presentation and discussion (40%)

Prerequisites:
None

Textbook/Learning Resources:
All the literature and graphics are available with share-file of Columbia Course Works and downloadable.

Offered:
Spring only; annually

Faculty assigned:
Kunio Kudo (Adjunct)

A4348, Architecture History I, 3 credits

Course Description:
The course explores major developments in European and American architectural history from the late seventeenth century to the mid-nineteenth century, emphasizing moments of significant change.

Course Goals and Objectives:
- To develop a critical understanding of how buildings and architectural theory are shaped by developments both internal and external to architecture, whether theoretical, economic, technological, or institutional in nature.
- To communicate this understanding in both research papers and critical essays, often dealing with primary sources.

Student Performance Criteria addressed:
A.1. Communication Skills
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
C.2. Human Behavior

Topical Outline:
Lectures, discussion sections with oral presentations, Avery library viewing (30%)
Reading of primary and secondary sources (35 %)
Writing of short essays and research paper/take-home exam (35%)

Prerequisites:
None

Textbooks/Learning Resources:
This course has no standard text but rather draws from a range of primary and secondary sources dealing architectural history from 1660-1860. Among the primary sources read are writings by Claude Perrault, Abbé Laugier, Piranesi, Quatremère de Quincy, A.W. Pugin, and John Ruskin. Secondary sources include selections from books by A. Braham, J. Summerson, R. Middleton, B. Bergdoll, A. Vidler, and M. Lewis, among others.
The course also uses visual materials available in Avery Library's rare book holdings, such as Piranesi's etchings of the carceri. In addition, several films are shown in the course of the term.

Offered:
Fall only; annually

Faculty assigned:
Mary McLeod (F/T)

A4349, History of Architecture II, 3 credits

Course Description:
The course traces the history of modern architecture and its transformation under the influence of two major forces: the process of modernization and the development of ideology.

Course Goals & Objectives:
- In addition to the above the primary text structuring this course is my own *Modern Architecture: A Critical History*. As with the book, the course aims to make the student aware of the relationship of architectural form to the political and economic underpinning of the particular epoch in which it comes into being.

Student Performance Criteria addressed:
A.1. Communication Skills
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
C.2. Human Behavior

Topical Outline:
Lecture 1: The Pursuit of the Millennium: Italian Futurism and the First World War 1900-1918
Lecture 2: Tony Garnier, Auguste Perret, and the Project of Classical Rationalism 1899-1939
Lecture 3: The Deutsche Werkbund: Germany, Architecture, and Industry 1892-1914
Lecture 4: Adolf Loos and the Viennese Crucible 1895-1931
Lecture 5: Frank Lloyd Wright and the Myth of the Prairie 1889-1910
Lecture 6: Le Corbusier and Purist Culture: France 1918-1929
Lecture 7: Dutch Neoplasticism 1917-1930
Lecture 8: Russian Constructivism 1917-1930
Lecture 9: The Weimar Republic and the New Objectivity: Germany and Holland 1918-1933
Lecture 10: Mies van der Rohe and the New Monumentality: Germany and America 1920-1965
Lecture 11: Alvar Aalto and Finnish National Romanticism 1923-1954
Lecture 12: Italian Rationalism and the New Rome 1922-1942
Lecture 13: The International Style in America 1932-1965

Prerequisites:
None

Textbooks/Learning Resources:
Frampton, Kenneth. *Modern Architecture: A Critical History (4th Edition)*. London: Thames & Hudson. 2007.
Short paper or extracts from many other authors are given as required or optional readings in the class reader.

Offered:
Spring only; annually

Faculty assigned:
Kenneth Frampton (F/T)

A4356, Contemporary Chinese City, 3 credits

Course Description:
The seminar explores how rapid urbanization in China has created new urban models, and how the resultant forms and patterns might influence cities of the future.

Course Goals & Objectives:
- The seminar is organized by urban topic/ phenomenon, with student teams leading each session.
- The course utilizes multiple source disciplines to discuss each topic, including film, architecture, urban planning/design, landscape, politics, etc.
- Relevant to the topic of discussion, guest speakers participate in the seminar to offer their insight and expertise.
- Parallel with the course topics are viewings of contemporary films from China from a new generation of urban filmmakers.
- Students learn how to research a way range of urban topics.
- Students learn how to present their findings, construct arguments, and lead class discussions.

Student Performance Criteria addressed:
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity

Topical Outline:
Research (50%)
Presentation skills (30%)
Class discussion (20%)

Prerequisites:
None

Textbooks/Learning Resources:
Campanella, Thomas J.. *The Concrete Dragon: China's Urban Revolution and what it means for the World* (New York: Princeton Architectural Press, 2008)
Jin, Wu, "The Historical Development of Chinese Urban Morphology," *Planning Perspectives, 8* (1993), pp 20-52.
Zhu, Jianfei, *Architecture of Modern China: a historical critique* (London; New York : Routledge, 2009)
Bray, David. *Social Space and Governance in Urban China: The Danwei System from Origin to Reform* (Stanford, USA: Stanford University Press, 2005)
Chung, Judy Chuihua, Jeffrey Inaba, Rem Koolhaas and Sze Tsung Leong. *Great Leap Forward* (Köln: Taschen; Cambridge, Mass.: Harvard Design School, 2001)
Koolhaas, Rem and Bruce Mau, *S, M, L, XL* (New York: The Monacelli Press, 1995)

Offered:
Fall only; annually

Faculty assigned:
Jeffrey Johnson (Adjunct)

A4378-A4379, Living Architecture I & II, 3 credits total

Course Description:
This hands-on workshop class offers an immersive introduction to the issues of interactive architecture and the techniques of designing with sensors, microcontrollers, and actuators.

Course Goals & Objectives:
- Students will learn to design systems of input, processing, and output.
- Students will apply an iterative design process, developing a new physical prototype each week to test design ideas.
- Students will learn how to use physical sensors and simple electric circuits.
- Students will learn how to program microcontrollers.
- Students will design and build full-scale, functioning proof-of-concept demonstrations of new possibilities for interactive architectural spaces.

Student Performance Criteria addressed:
A. 11. Applied Research

Topical Outline:
Weekly physical prototypes (50%)
Documentation on class blog (20%)
Final functioning demonstration (30%)

Prerequisites:
None

Textbooks/Learning Resources:
N/A

Offered:
Spring only; annually

Faculty assigned:
David Benjamin (F/T)
Kevin Wei (Adjunct)
Soo-in Yang (Adjunct)

A4378-A4379, Living Architecture I & II, 3 credits total

Course Description:
Introduction to issues of responsive kinetic architecture and techniques of electronic circuit design. Students build full-scale demonstrations and argue their prototype's contribution to a real world situation or context.

Course Goals & Objectives:
- Explore interactive environments based on movement
- Design through full-scale prototyping
- Break down complex systems into testable modules
- Document research so that it can be built on by future experimenters

Student Performance Criterion addressed:
A.11. Applied Research

Topical Outline:
Explore interactive movement and design full-scale prototypes (50%)
Create testable modules and document research (50%)

Prerequisites:
None

Textbooks/Learning Resources:
Klinkenborg, Verlyn. *Without Walls* (New York Times Magazine, May 16, 2004)
Guy Nordenson, Structural Engineer, Guy Nordenson and Associates

Offered:
Fall and Spring; annually

Faculty assigned:
David Benjamin (F/T)
Soo-in Yang (Adjunct)
Kevin Wei (Adjunct)

A4429, Studies in Tectonic Culture, 3 credits

Course Description:
The lecture course traces the emergence of the tectonic theory and practice in the evolution of 18th, 19th and 20th Century architecture (1750-1965).

Course Goals & Objectives:

- The tectonic proffers itself today as a critical strategy largely because of the current tendency to reduce architectural form to a spectacular image. This emphasis on structure and construction is to be seen as a response to the postmodern preoccupation with the scenographic. Greek in origin, the term *tectonic* derives from the term *tekton*, signifying carpenter or builder. In a 1963 essay, Eduard Sekler distinguished between (1) *structure* as the fundamental anti-gravitational principle of built form, (2) *construction* as a particular technique necessary for the realization of the form and (3) *tectonics* as an expressive interaction between these modes.
- This lecture course traces the emergence of the tectonic theory and practice in the evolution of 19th and 20th century architecture. In so doing, it will examine the role played by structure and construction in the development of modern form. It will also address the so-called autonomy of architecture not only in terms of space and form but also from the standpoint of the poetics of construction, as this has made itself manifest over the past 150 years.

Student Performance Criteria addressed:
A.9. Historical Traditions and Global Culture

Topical Outline:
Lecture 1: Introduction: Reflections on the Scope of the Tectonic
Lecture 2: Tectonic Organicism and the Structural Rationalism of Viollet le-Duc, Semper
Lecture 3: Tectonic Theory in 19th Century German Architectural Culture
Lecture 4: Tectonic Theory in 19th Century German Architectural Culture
Lecture 5: Hendrik Perus Berlage and the Pursuit of Style
Lecture 6: Otto Wagner and the Raiment of Modernity
Lecture 7: Frank Lloyd Wright and the Textile Tectonic
Lecture 8: Auguste Perret and Structural Classicism
Lecture 9: Mies van der Rohe: Avant Garde & Continuity
Lecture 10: Louis Kahn: Modernization and Monumentality
Lecture 11: Jorn Utzon: Earthwork vs. Roofwork
Lecture 12: The Tectonic Trajectory: Extension into the Present: Hertzberger, Le Corbusier, Fuller, Wachsmann, Piano, Foster, and Moneo 1903-2000

Prerequisites:
None

Textbooks/Learning Resources:
Frampton, Kenneth. *Studies in Tectonic Culture*. Cambridge, MA: MIT Press. 1995

Offered:
Spring only; annually

Faculty assigned:
Kenneth Frampton (F/T)

A4460, Japanese Urbanism, 3 credits

Course Description:
Tokyo/Edo and major Japanese cities will be studied and situated in the seeming contradiction of universalizing technologies and romantically preserved particularities.

Course Goals & Objectives:
- Close reading and analysis of several texts, including history, philosophy, theory, literature, anthropology, criticism and urbanism.
- Visual analysis of artifacts such as maps, films, advertisements, photographs and art.
- Goal: Students read a different culture, through its most complex form – a city. Demonstration of critical thinking.

Student Performance Criteria addressed:
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity

Topical Outline:
Reading, analysis of documents (60%)
Presentation skills (40%)

Prerequisites:
None

Textbooks/Learning Resources:
Ozu: *Tokyo Story*
Wenders,Wim*: Tokyo Ga*
Sorensen, Andre: *The Making of Urban Japan*
Buruma, Ian: *Inventing Japan*
Koolhaas, Rem: *Project Japan*
Isozaki,Arata: *Japaness in Architecture*
DeCerteau, Michel: *Practice of Everyday Life*
Lefebvre, Henri: *The Everyday and Everydayness*
Sacchi, Livio: *Tokyo: City and Architecture*
Coaldrake, William: *Architecture and Authority in Japan*

Offered:
Spring only; annually

Faculty assigned:
Lynne Breslin (Adjunct)

A4515, Network Culture, 3 credits

Course Description:
This seminar introduces students to the impact of networks not merely as technologies but rather as cultural dominants connecting changes in architecture, society, and urbanism.

Course Goals & Objectives:
- Students will understand basic principles of network technology, their history, and their impact.
- Students will explore critical perspectives with regard to networks and their impact on culture, society, and politics.
- Students will explore forms of visual communication, using software for long document layout to carry out their argument.
- Students will learn to read texts and examine online materials critically.

Student Performance Criterion addressed:
A.9. Historical Traditions and Global Culture

Topical Outline:
Drawing and other representational techniques (25%)
Critical thinking and writing (75%)

Prerequisites:
None

Textbooks/Learning Resources:
Online reader at Columbia's Courseworks

Offered:
Fall only; annually

Faculty assigned:
Kazys Varnelis (Adjunct)

A4517, Exotic Moderns: City, Space, and 'Other' Modernities, **3 credits:**

Course Description:
This seminar investigates the architecture and urbanism of contemporary cities in Asia, Africa, and Latin America, to understand their fragmented, complex, and paradoxical built forms in the context of globalization and colonialism.

Course Goals & Objectives:
- Students will explore the plural landscapes of 'non-Western' cities through the study of a variety of spatial expressions from historic quarters and colonial urban design to the manifestations of global cities.
- Students will be introduced to historical narratives and theoretical constructs to understand modernity and postcolonialism in contemporary architecture and urbanism in the non-West.
- Students will learn about the work of key contemporary architects in the non-West.
- While greater emphasis is placed on South Asia, readings and student research projects explore regions in Asia, Africa, and Latin America.
- Class assignments aim to refine critical thinking and writing skills.

Student Performance Criteria addressed:
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity

Topical Outline:
Modernity and the Orient: historical and theoretical understandings (20%)
Historic cities (8%)
Nationalism and Identity (8%)
Colonial capitals (8%)
Post-colonial capital cities (8%)
Squatters and Housing (8%)
Contemporary non-Western Architects (16%)
Heritage and tourism (8%)
Globalization (8%)
Humanitarian and green imperatives for design (8%)

Prerequisites:
None

Textbooks/Learning Resources:
Jyoti Hosagrahar, *Indigenous Modernities: Negotiating Architecture and Urbanism* (London; New York; New Delhi: Routledge, 2005)
Additional required readings for the course will be available on reserve in Avery library and as electronic reserves.

Offered:
Fall only; annually

Faculty assigned :
Dr. Jyoti Hosagrahar (Adjunct)

A4529, Colonial and Post-Colonial Architecture, 3 Credits

Course Description:
Colonialism has shaped housing, commerce, government, schools, tourism, and other kinds of architecture everywhere –including Europe and the US. Post-colonial influences still affect today's "global" cities.

Course Goals and Objectives:

- A broad-based knowledge about "non-western" architectural typologies around the world -- under colonialism, since independence and in the present-day
- An understanding of the complex role, responsibilities and restrictions on design professionals in colonial and postcolonial circumstances, where their good intentions were often thwarted by officials more concerned with profit and domination
- An awareness of the romantic allure of "vernacular cultures" that has encouraged western architects' travel to "authentic" places in the Third World
- Exploration of the questions one must ask and resources one must search for when designing in another culture – which of course raises issues about sites and cultural tensions closer to home (a basic premise of postcolonialism)

Student Performance Criterion addressed:
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity

Topical Outline:
Overview (10%)
Colonial architecture by Europe, Japan, the US, etc. (30%)
Nationalist architecture after independence and UN, etc. involvement in architectural reforms (20%)
Contemporary architecture in the Third World, including the work of western architects (50%)

Prerequisites:
None

Textbooks/Learning resources:
Varied readings available

Offered:
Spring only; intermittently

Faculty assigned:
Gwendolyn Wright (F/T)

A4542-A4534, Imagining the Unreal & Techniques of the Ultrareal, 3 credits total

Course Description:
This is an introductory course to digital representation which will examine the role synthetic imaging plays in the representation and perception of the built environment. The course will explore digital representational models from synthetic image construction and photo compositing, to montage, through to still and moving image.

Course Goals & Objectives:
- Establish a critical visual literacy with respect to photography, film, synthetic imaging and animation.
- Establish a base line literacy with respect to the fundamentals of modeling, photography, lighting and post production.
- Examine the image construction pipeline through the the disciplines of environment modeling, lighting, photography, texturing, rendering, color grading, compositing and visual effects.
- Exploration and transformation of light, material, form, atmosphere and representational models through iterative workflows from real time material prototyping to the analytic use of serialized imagery and animation.
- Students will learn presentation skills to be used throughout their academic careers.

Student Performance Criterion addressed:
A.3. Visual Communication Skills

Topical Outline:
Drawing and other representational techniques (60%)
Presentation skills (40%)

Prerequisites:
None

Textbooks/Learning Resources:
Case studies, workshops, movie tutorials, web resources.

Offered:
Fall and Spring; annually.

Faculty assigned:
Chris Hoxie (Adjunct)
Kevin Cimini (Adjunct)

A4535, Digital Craft, 3 credits

Course Description:
Students will explore the concepts, techniques, and working methods of computer aided 'drawing' in architecture from the basics to advanced technique.

Course Goals & Objectives:
- Students study the operative relationship between 2d and 3d data, exploring the reaches of their analytic and representational potential.
- Students investigate tools to further the analytic and representational capacity of the data within the digital model. Studies will be in the form of drawings, physical models, images, and animations

Student Performance Criterion addressed:
A.3. Visual Communication Skills

Topical Outline:
2D and 3D digital drawing technique (30%)
Parametrics (20%)
Fabrication (20%)
Advanced Fabrication (10%)
Representation/Analysis Technique (20%)

Prerequisites:
None

Textbooks/Learning Resources:
http://digitalcraft2012.ning.com/ (course website)
Architectural Geometry by Helmut Pottmann, Andreas Asperl, Michael Hofer, Alex Kilian
Digital Lighting and Rendering by Jeremy Birn
Inside Rhinoceros 4 by Ron K.C. Cheng

Offered:
Summer only; annually

Faculty assigned:
Joshua Uhl, AIA (Adjunct)
David Fano (Adjunct)

A4537, Outside the Box, 9 credits

Course Description:
This seminar critically examines projects by architects that are not at the scale of permanent buildings but rather at the scale of installations, pavilions and exhibitions.

Course Goals & Objectives

- Students gain a familiarity with, and an understanding of the rich history of architectural experimentation at various scales of implementation including the theoretical and conceptual ideas, the significant contextual conditions and relevancy to architectural practice through readings and seminar discussions
- Students learn to make in class presentations and to produce a multi-media app to present their research of their chosen topic

Student Performance Criteria addressed:
A. 11. Applied Research

Topical Outline
Architecture in Art / Art in Architecture (20%)
Visions of Utopia, the 60's and 70's (20%)
Digital/Post-digital experiments (20%)
The Gallery as laboratory (20%)
Project as Prototype (20%)

Prerequisites:
None

Textbooks/Learning Resources:
Diverse relevant, books, articles, websites, films or videos on works by Le Corbusier, Mies van de Rohe, Archigram, Coop Himmelblau, Haus Rucker, Bernard Tschumi, Diller Scofidio, UN Studio, Asymptote Architecture, Zaha Hadid, among others

Offered:
Spring only; 2012

Faculty assigned
Lise Anne Couture (F/T)

A4546, Cell City, 3 credits

Course Description:
This class taught in partnership with Telefónica, the third largest cell phone company worldwide, students explore how cell phone data can expose hidden city patterns.

Course Goals & Objectives:
- The class will focus on creating compelling visuals that highlight patterns that might not have otherwise been seen in the city, thereby highlighting new vantage points of big data.
- In order to do this, students will have to become familiar with the data itself, through exercises that help extract subsets of the data and use it to compare information with other traditional data sets.
- Student will also learn how to represent data using programs such as processing, ArcGIS, and other visualization software.

Student Performance Criterion addressed:
A. 3. Visual Communication Skills
C. 3. Client Role in Architecture

Topical Outline:
Data Analysis (40%)
Representation (40%)
Presentation (20%)

Prerequisites:
None

Textbooks/Learning Resources:
No one text book used.
Various readings about technology and the use of cell phone data for research.

Offered:
Spring only; 2011

Faculty assigned:
Sarah Williams (F/T)

A4560, Professional Practice, 3 credits

Course Description:
An examination of the practice of architecture, and its relation to society

Course Goals & Objectives:
- To teach students and discuss:
  - The profession and practice of architecture, and being an architect,
  - IDP
  - The purpose and process of licensing
  - Parties in the construction process- designers, owners, constructors, public
  - Financial issues-project financing, estimating, life cycle costs
  - Ethics, leadership and civic responsibility to community, society and planet
  - Alternate project delivery methods,
  - The contractual responsibilities of an architect
  - The stages of an architectural project
  - Technical documents- working drawings, project manuals, other process documents
  - Starting, maintaining and evolving an architectural practice
  - Legal and insurance issues
  - Project management
  - Zoning, building codes, landmarks, ADA, other regulatory issues
  - The future of the profession

Student Performance Criteria addressed:
A.4. Technical Documentation
B.7. Financial Considerations
C.3. Client Role in Architecture
C.4. Project Management
C.5. Practice Management
C.6. Leadership
C.7. Legal Responsibilities
C.8. Ethics and Professional Judgement

Topical Outline:
N/A

Prerequisites:
None

Textbooks/Learning Resources:
Professional Practice: A Guide to Turning Designs into Buildings, by Paul Segal, FAIA; W.W.Norton; 2006;

Offered:
Fall only; annually

Faculty assigned:
Paul Segal, FAIA; (Adjunct), Director of Practice, IDP Coordinator

A4566, Architecture, Print, Politics: Case Studies 1945 to 1975, 3 credits

Course Description:
The course examines how architects responded to a radical transformation of printing technologies and publications strategies in the three decades following World War Two. The seminar examines how architects and urbanists reshaping strategies for publication and in turn how these publications crucially incubated a new architectural concepts.

Course Goals & Objectives:
- Students will develop an in-depth historical knowledge of key magazines realized by architects between 1945-1975
- Students will learn presentation skills to be used throughout their academic careers
- All class sessions are held in Avery archives, exposing students to rare physical artifacts and methods of archival research

Student Performance Criterion addressed:
A.1. Communications Skills
A.9. Historical Traditions and Global Culture

Topical Outline:
Class Presentations and Participation 50%
Final Paper (10-15 pages) 50%

Prerequisites:
None

Textbooks/Learning Resources:
Beatriz Colomina and Craig Buckley, *Clip/Stamp/Fold: The Radical Architecture of Little Magazines 196X-197X*, (Barcelona: ACTAR, 2010).
Walter Benjamin, *The Work of Art in the Age of its Technological Reproducibility*, Ed. Michael Jennings, Brigid Doherty, Thomas Levin, (Cambridge: Harvard University Press, 2008).
Mario Carpo, *Architecture in the Age of Printing: Orality, Writing, Typography, and Printed Images in the History of Architectural Theory,* (Cambridge: MIT Press, 2001).

Offered:
Fall only; annually

Faculty assigned:
Craig Buckley (Adjunct)

A4566, Collecting Architecture - Territories, 3 credits

Course Description:
This course looks of the explosion of private museums of contemporary art over the last three decades and its implications for the field of architecture. The emphasis upon territories recognizes that the contemporary global proliferation of collecting activities, which no longer correspond to the historically defined centers of cultural power, but occupy a new set of global cities as well as remote regions and "non-sites."

Course Goals & Objectives:
- Course will expose students to current scholarship into the growth of museums in recent decades
- Students will be develop a database of spatial information on private institutions and develop methods of analyzing these institutions
- Students are supported to travel to field research at selected institutions, developing research, interviewing, and presentation skills to be used throughout their academic and professional careers
- Taught in conjunction with studio devoted to the same topic

Student Performance Criterion addressed:
A,1. Communication Skills
A.5. Investigative Skills

Topical Outline:
Class Presentations and Participation (50%)
Final Research Document (10-12 pages) (50%)

Prerequisites:
None

Textbooks/Learning Resources:
Andrew McClellan, *The Art Museum from Boullée to Bilbao*, (Berkeley, University of California Press, 2008).
Hal Foster,*The Art-Architecture Complex*, (London: Verso, 2011).
Texte zur Kunst no. 83 (Special issue: The Collectors) (September 2011).

Offered:
Spring only; two-year special research course

Faculty assigned:
Craig Buckley (Adjunct)

A4568, Mapping Global New York City, 3 credits

Course Description:
This course addresses theory, history and techniques of mapping. In 2011 the course practical assignment was to map transnationalism by way of local city blocks and their relationship to other urban or rural places globally.

Course Goals & Objectives:
- Students were required to read books and articles on transnationalism as well as theories of cartography.
- Using remittances data, census data, field documentation, and interviews, the students worked to understand transnationalism and its spatial manifestations in New York City paired with a location elsewhere — sometimes rural, sometimes urban..
- Students produced and launched a collaborative website: www.thereandhere.org

Student Performance Criterion addressed:
A.1. Communication Skills
A.3. Visual Communication Skills

Topical Outline:
Readings in theory of cartography and transnationalism (50%)
Workshops and production of new open source software including Zeega and Tilemill. (50%)

Prerequisites:
None

Textbooks/Learning Resources:
Abrams and Hall. eds., *Else/Where Mapping*
Peter Galison, *Einstein's Clocks*
Poincare, *Maps*
Steven Johnson, *The Ghost Map*
Dodge Perkins, *Rethinking Maps*
Paul Stoller, *Money has No Smell*
Manuel Orozco, *Sending Money Home*

Offered:
Spring only; annually

Faculty assigned:
Laura Kurgan (F/T)

A4571, StillspottingNYC, 3 credits

Course Description:
For *stillspotting nyc*, the Spatial Information Design Lab challenged 15 graduate students from the Architecture, Urban Design, and Urban Planning programs at Columbia University to investigate the concept of stillness in a fast-moving city. The seminar established a theoretical and working framework that fluctuated between the sciences and humanities from week to week.

Course Goals & Objectives:
- Students were required to read books and articles on the art, architecture, and science of noise and stillness.
- Students were to invent strategies for collecting data about silence and noise, and to visualize this data into maps of New York City using cell phones or a software called processing in relation to GIS.
- Student work was displayed on the Guggenheim Website as part of their education outreach program for a series of outdoor site-specific projects.
- See: http://stillspotting.guggenheim.org/data-studies/ for results

Student Performance Criterion addressed:
A.1. Communication Skills
A.3. Visual Communication Skills

Topical Outline:
Readings in history and theory of noise from a multi-disciplinary perspective. (50%)
Workshops and production of mapping projects, processing tools, cellphone and webtools. (50%)

Prerequisites:
None

Textbook/Learning Resources:
Visiting Specialists: Arline Bronzaft (Chair of the Noise Committee, Mayor's Committee on the Environment of New York City), Les Blomberg (Founder and Director, Noise Pollution Clearing House), Saul Fisher (Interim Associate Provost and Visiting Associate Professor of Philosophy, Mercy College), Robyn Gershon (Professor of Clinical Sociomedical Sciences, School of Nursing; Associate Dean for Research Resources, Department of Sociomedical Science, Columbia University), Branden Joseph (Frank Gallipoli Professor of Modern and Contemporary Art, Department of Art History and Archeology, Columbia University), and Daniel Perlin (artist).

Offered:
Spring only; 2012

Faculty assigned:
Laura Kurgan (F/T)
Sarah Williams(F/T)

A4577, Architects' Manifestos In The 20th Century, 3 credits.

Course Description:
Are manifestos still a relevant form for advancing the field or a relic of bygone age? The first part of the course examines and analyzes manifestos from the early twentieth century that have decisively impacted the field. The second part extends this investigation, mapping the dissemination and transformation of manifestos from the mid-1950s onwards.

Course Goals & Objectives:
- Course will expose students to current scholarship into manifestos
- Students will be develop thorough historical knowledge of key documents in 20th century architecture
- Students will learn presentation skills to be used throughout their academic careers
- All class sessions are held in Avery archives, exposing students to rare physical artifacts and methods of archival research

Student Performance Criterion addressed:
A.1. Communication Skills
A.3. Visual Communication Skills
A.9. Historical Traditions and Global Culture

Topical Outline:
Class Presentations and Participation (50%)
Final Research Document (10-15 pages) (50%)

Prerequisites:
None

Textbooks/Learning Resources:
Ulrich Conrads, *Programs and Manifestoes on 20th Century Architecture*, (MIT Press, 1970).
Mary Ann Caws, *Manifesto: a Century of Isms*, (Lincoln: University of Nebraska Press, 2001).
K. Michael Hays, ed. Architecture Theory since 1968, (Cambridge: The MIT Press, 1998).
Charles Jencks, *Theories and Manifestos of Contemporary Architecture* (London: Wiley and Sons, 2005 [1997]).
Joan Ockman and Ed Eigen, eds. *Architecture Culture 1943-1968: a Documentary Anthology*, (New York: Columbia University, 1993).

Offered:
Fall only; 2011
(*developed in conjunction with Conference "What happened to the architectural Manifesto? November 2011)

Faculty assigned:
Craig Buckley (Adjunct)

A4577, Introduction to GIS, 3 credits

Course Description:
GIS is best taught through practical example. The first half of the course will focus on the basics and the second half allows students to develop their own project.

Course Goals & Objectives:
- Provide an understanding of basic skills necessary to work with Geographic Information Systems (GIS), using ESRI's ArcGIS software.
- Learn spatial data visualization techniques.
- Develop skills needed to work through a project that uses GIS as a management or visualization tool.
- Learn how to find publicly accessible data sets.
- Learn how to create GIS files using a variety of methods including GPS units.

Student Performance Criteria addressed:
A.3. Visual Communication Skills

Topical Outline:
Research Methods (40%)
GIS and Presentation Skills (60%)

Prerequisites:
None

Textbooks/Learning Resources:
Juliana Maantay and John Ziegler, *GIS for the Urban Environment* , ESRI Press, 2006

Offered:
Fall, Spring; annually

Faculty assigned:
Sarah Williams (F/T)
Jessie Braden (Adjunct)

A4581, Exhibition Histories, Curating Theories, 3 credits

Course Description:
This course tracks the history of architectural exhibitions and the expansion of architectural curating in the postwar period.

Course Goals & Objectives:
- Students will develop tools, techniques and methods for assessing architectural exhibitions and their effects by examining issues of display, value, collection, narration, and exhibition informational systems.
- The course aims to form novel approaches to the analysis, interpretation and comparative reading of architectural exhibitions and to establish new possibilities for curatorial work, exhibition research and scholarship.

Student Performance Criterion addressed:
A.1. Communication Skills
A.3. Visual Communication Skills

Topical Outline:
Discussion of weekly readings (70%)
Discussion and presentation of student research (30%)

Prerequisites:
None

Textbooks/Learning Resources:
Weekly readings on Courseworks

Offered:
Fall only; annually

Faculty:
Mark Wasiuta (Adjunct)

A4594, The Artificial Cryosphere, 3 credits

Course Description:
The purpose of this seminar is to research, document, and analyze the architectures, infrastructures, and other spatial technologies of cold preservation.

Course Goals & Objectives:
- Students will learn how to research, document, and analyze the architectures, infrastructures, and other spatial technologies of cold preservation.
- Student will either explore an aspect of the artificial cryosphere to present through a carefully curated selection of visual documentation and written analysis in an accessible format of their choice OR design a speculative project that uses techniques of atmospheric modification.

Student Performance Criterion addressed:
A.3. Visual Communication Skills
B.8. Environmental Systems

Topical Outline:
Class discussion (30%)
Site documentation (30%)
Final curatorial or speculative design project (40%)

Prerequisites:
None

Textbooks/Learning Resources:
Ackermann, Marsha, *Cool Comfort: America's Romance with Air-Conditioning* (Washington D.C.: Smithsonian Institute, 2010)
Banham, Reyner, *The Architecture of the Well- Tempered Environment* (Chicago: University of Chicago Press, 1969, 1984)
Freidberg, Susanne, *Fresh: A Perishable History* (Cambridge, MA: Harvard University Press, 2009)
Gissen, David, *Subnature: Architecture's Other Environments* (New York: Princeton Architectural Press, 2009)
Weightman, Gavin, *The Frozen-Water Trade: A True Story* (New York: Hyperion, 2003)

Offered:
Fall; 2011

Faculty assigned:
Nicola Twilley (Adjunct)

A4596, 12 Dialogical/Poetic Strategies, 3 credits

Course Description:
This seminar will introduce key critical aspects of our field through 12 concepts (Irony, Melancholia, The Sublime, Gravity and Grace, Visible and Invisible, etc.) that will be approached from a philosophical, literary and artistic stance.

Course Goals & Objectives:
- Students will deepen their research and criticism skills.
- Students will explore a heuristic way of approaching a critical subject

Student Performance Criterion addressed:
A.1. Communications Skills

Topical Outline:
Research (60%)
Paper (40%)

Prerequisites:
None

Textbooks/Learning Resources:
Calvino, Italo. *Six Memos for the Next Millennium*. Cambridge, MA: Harvard University Press, 1988.
Hegel, Georg Wilhelm Friedrich. *Phänomenologie des Geistes* (1807)/ *The Phenomenology of Spirit*. Oxford: Clarendon Press, 1977.
Heidegger, Martin. "The Origin of The Work of Art," in *Poetry, Language, Thought*. New York: Harper & Row, 1975.
Husserl, Edmund. *Origin of Geometry: An Introduction*. Stony Brook, NY: N.Hays, 1978.
Kant, Immanuel (1724-1804) *Analytic of the Beautiful, From the Critique of Judgment.* Indianapolis: Bobbs-Merrill, 1963.
Merleau-Ponty, Maurice. *Phenomenologie de la Perception/Phenomenology of Perception*. Atlantic Highlands, NJ: Humanities Press, 1981.
Musil, Robert. *Mann öhne Eingenschaften/ The Man without Qualities.* New York: Coward- McCann, 1953.
Wittgenstein, Ludwig. *Tractatus Logico-Philosophicus.* New York: Routledge and Kegan Paul, 1986.

Offered:
Fall and Spring; annually.

Faculty assigned:
Yehuda E. Safran (Adjunct)

A4598, Modern Housing, 3 credits

Course Description:
Improved housing has been a prime concern for modern architects' experiments. This class explores how the terms, forms and ambitions have evolved up to the present.

Course Goals and Objectives:
- Exploration of the experiential, architectonic and social meanings of the term "modern housing," as well as "house," "home," etc. – in different languages and as they have changed over time and place
- Overview of iconic examples of modern housing from a range of places in the world, including but not exclusively Europe
- Analyses of major concerns and experiments in the present day
- Skills for short presentations and analyses of other students' work

Student Performance Criterion addressed:
A.9. Historical Traditions and Global Culture

Topical Outline:
Analysis of the changing criteria and goals for "modern housing" (10%)
Historical background (25%)
Contemporary housing analyses (65%)

Prerequisistes:
None.

Textbooks:
Extensive but varied reading, including student papers from previous years

Offered:
Fall only; annually

Faculty assigned:
Gwendolyn Wright (F/T)

A4605, Italian Renaissance Architecture 1400-1600: *Regola* and *Invenzione*, 3 credits

Course Description:
Overview of Italian Renaissance architecture from Brunelleschi to Palladio. Focussing on the dialectic of rule and invention, we study the emergence of languages based on antiquity yet moving beyond its example.

Goals and Objectives:
- At midterm, a one page description of the research topic, with bibliography of primary and secondary sources.
- A final research paper balancing formal analysis with use of period textual sources.

Student Performance Criterion addressed:
A.1. Communication Skills
A.9. Historical Traditions and Global Culture

Topical Outline:
Research and Writing (75%)
Readings (25%)

Prerequisites:
None

Textbooks/Learning Resources:
Ludwig Heydenreich, *Architecture in Italy 1400-1500* (Yale 1995)
Wolfgang Lotz, *Architecture in Italy 1500-1600* (Yale 1995)

Offered:
Fall only, annually

Faculty Assigned:
Dr. Daniel Sherer (Adjunct)

A4618, Architecture as Concept (from 1968 to the present), 3 credits

Course Description:
This seminar takes as its starting hypothesis that there is no architecture without a concept, and that concepts are what differentiate architecture from mere building.

Course Goals & Objectives:
- Students will identify one or several major concepts that have either become out of date (‘‘against’’) or are still relevant today (‘‘for’’), as measured in relation to today’s in ethical, ideological, economic, or formal standards.
- Students will be required to make in-class presentations and write a final research paper. Class sessions will be focused around presentations and discussions of weekly readings and occasional contributions by invited guests.

Student Performance Criterion addressed:
A.1. Communication Skills
A.5. Investigative Skills

Topical Outline:
Analysis of architectural criticism (80%)
Presentation skills (20%)

Prerequisites:
None

Textbooks/Learning Resources:
Course Reader, comprised of various articles of architectural criticism

Offered:
Spring only; annually

Faculty assigned:
Bernard Tschumi (F/T)

A4623, Sustainable Futures: EI/GSAPP, 3 credits

Course Description:
This seminar brings together thinking in design and policy towards developing a toolkit of strategies and scenarios for change.

Course Goals & Objectives:
- Students will discuss interdisciplinary strategies for engaging the built environment and generating new modes of sustainable thinking
- Students will explore case studies of positive change and highlight new models of applied sustainable practices in the built environment

Student Performance Criterion addressed:
B.3. Sustainability

Topical Outline:
Writing (50%) Discussion
(10%) Presentation skills
(40%)

Prerequisites:
None

Textbooks/Learning Resources:
Kolbert, Elizabeth *Field Notes from a Catastrophe*, Bloomsbury, 2006
Orff, Kate and Misrach, Richard. *Petrochemical America*, Aperture 2012
Owen, David *Green Metropolis: Why Living Smaller, Living Closer, and Driving Less Are the Keys to Sustainability*, 2009
Sachs, Jeffrey *Common Wealth: Economics for a Crowded Planet* Penguin, 2008
Steffen, Alex ed. *Worldchanging: A User's Guide for the 21st Century* Abrams, 2009

Offered:
Fall only; annually

Faculty assigned:
Kate Orff (F/T)

A4634, Advanced Curtain Wall, 3 credits

Course Description
This course is the final offering in the GSAPP technology sequence, and offers an intense exposure to the custom curtain wall in a lecture/seminar and technical studio format. It is the intent of the course to provide graduating students with a comprehensive understanding of the technical concepts and specific skills necessary to undertake in actual practice the design, detailing, specification, and construction administration of the custom curtain wall.

Course Goals & Objectives:

- Students will become conversant with specific technologies in the context of the building enclosure as a technical system of component parts.
- Students will become familiar with recent and emerging technologies, such as new glazing and cladding materials, double skin facades, and interactive facades, cable-stayed and structural glass systems, etc., will also be presented and discussed.
- A key feature of the course is the *Technical Studio Design Problem* which is assigned at the beginning of the semester and concludes with a final formal review: in this exercise, students will develop detail drawings and prepare outline specifications for a unique curtain wall of their own design. The lecture and seminar content of the course is intended to inform the studio component and vice versa.
- Students will undertake a brief case study/research project on a topic (building, system, material, etc.) related to their design detailing projects, and will provide a written report and/or brief oral presentation to the class.
- Finally, students will be introduced to the contract documentation and construction administration of the curtain wall/building enclosure. This will include a discussion of design documentation, forms of contract, the state of the industry both domestic and international, review of fabricators' submittals and shop drawings, testing, site inspection, etc.

Student Performance Criteria addressed:
A.4. Technical Documentation
B.10. Building Envelope Systems

Topical Outline:
Seminar materials and exams (50%)
Technical Studio Design Problem (50%)

Prerequisites:
A4115 Architectural Technology V

Textbooks/Learning Resources:
Numerous references for the course are on reserve at Avery

Offered:
Spring only; annually

Faculty assigned:
Robert Heintges, FAIA (Adjunct)

A4635, Architectural Daylighting, **3 credits**

Course Description:
Introduction to the technical and design challenges of the functional and aesthetic role of daylighting in building design. Class instruction focuses on the daylighting resource, the categorization of “skies”, daylight phenomena in nature, solar geometry, shading design, perimeter daylighting strategies, core daylighting strategies. The first nine sessions carry homework assignments, a mixture of case studies and calculations. The last three assignments involve the construction and testing of a daylighting model of a space of the student’s own choosing or design.

Course Goals & Objectives:
- Development and presentation of case studies highlighting daylighting design.
- Hand calculation of fundamental solar angles. Determination of
- shading using Sun Angle Calculator Determination of daylight
- quantities using pepper pop method.
- Development and photographic presentation of daylighting study model(s).
- Development of appreciation of daylighting’s role in sustainable architectural design
- Development of appreciation of daylight’s unique combined functional and aesthetic role in architecture.

Student Performance Criterion addressed:
B.3. Sustainability
B.8. Environmental Systems

Topical:
Daylighting design strategies and technical systems acquisition: (60%)
Daylighting model studies: (40%)

Prerequisites:
None

Textbooks/Learning Resources:
Classnotes: Davidson Norris
Textbooks: none
On reserve readings: extensive
Tools: Pilkington Sun Angle calculator

Offered:
Spring; annually

Faculty:
Davidson Norris (Adjunct)

A4642, Contested Grounds: The Spatial Politics of Memory/History, 3 credits

Course Description:
This seminar examines the difference between the formalization of the past through history and monumental architecture and the informal experience of the past through memory.

Course Goals & Objectives:
- Students develop critical thinking and analysis skills by reading texts in history and theory. They are also required to participate in class discussions.
- Students develop their verbal skills by presenting of one of the course readings.
- Students hone their writing skills by submitting one analysis paper (2500 words) at mid term and one research paper (4000 words) at the end of the semester

Student Performance Criterion addressed:
A.1. Communication Skills
A.9. Historical Traditions and Global Culture

Topical Outline:
Writing (30%)
Reading and critical thinking (30%)
Presentation skills (10%)
Discussion (40%)

Prerequisites:
None

Textbooks/Learning Resources:
Halbwachs, Maurice. *The Collective Memory*. 1st ed, Harper Colophon Books. New York: Harper & Row, 1980.
Hobsbawn, E.J. *Nations and Nationalism Since 1780.* Cambridge: Cambridge University Press, 1992.
Huyssen, Andreas. *Present Pasts: Urban Palimpsets and the Politics of Memory*. Stanford, Calif.: Stanford University Press, 2003.
Lefebvre, Henri. *State Space World: Selected Essays.* Edited Neil Brenner and Stuart Elden. Minneapolis: University of Minnesota Press, 2009.
Nora, Pierre. "Between Memory and History: Les Lieux De Memoire." *Representations* 26, (1989): 7-25
Sorkin, Michael. “Back to Zero: Mourning in America.” In *Indefensible Space: The Architecture of the National Security State* ed. Michael Sorkin. New York: Routledge, 2008
Sturken, Marita. *Tourists of History Memory, Kitsch, and Consumerism from Oklahoma City to Ground Zero.* Durham: Duke University Press, 2007.
Wigley, Mark. "The Architectural Cult of Synchronization." *October* 94, no. Autumn (2000). Cambridge: MIT Press, p. 31-61

Offered:
Fall only; annually

Faculty assigned:
Mabel O. Wilson (F/T)

A4645, Philosophy of Technology, "Ought We Build It?", 3 credits

Course Description:
Examination of historical and contemporary philosophical ideas regarding technology and its effect on the built environment and on man, emphasizing ethical choices.

Course Goals & Objectives:
- To have students read selections from philosophers offering different technological strategies (epistemological, anthropological, sociological, ontological), from Aristotle to Heidegger. In parallel they will be exposed to ethical systems of philosophy that are relevant to making technological decisions.
- To learn to extract specific meaning from the readings.
- To engage in class discussion in a seminar format.
- To write about topics assigned from the syllabus, using principles of critical thinking.

Student Performance Criterion addressed:
N/A

Topical Outline:
Reading assigned and optional material (60%)
Oral discussion in seminar (20%)
Writing papers (20%)

Prerequisites:
None

Textbook/Learning Resources:
Scharff, Robert C. and Dusek, Val. *Philosophy of Technology – The Technological Condition.* Blackwell Publishing, Malden, MA. 2003
Other readings: 20 (+/-) essays scanned into New CourseWorks

Offered:
Spring only; annually

Faculty assigned:
Robert Silman (Adjunct)

A4656, Fast Pace / Slow Space, 3 credits

Course Description:
The course uses the concept of time to drive the design and fabrication of a meditative structure, using parametric modeling, scripting, fabrication processes and construction.

Course Goals & Objectives:
- Student groups will prepare a conceptual design thesis that will guide them throughout the design and construction processes.
- Detailing will be developed simultaneously with form so speed of assembly is considered from the beginning, and joints are neither post-rationalized nor tacked on.
- The students will develop their theses throughout the design and construction process in order to create a detailed analysis of the project that can easily be packaged for publication or presentation.
- Final constructions should comprise of only a few materials, allowing the form and fabrication techniques to remain the most prominent elements.

Student Performance Criterion addressed:
A.4. Technical Documentation
A.11. Applied Research
B.12. Building Materials and Assemblies

Topical Outline:
Drawing and other representational techniques (20%)
Presentation skills (10%)
Technical detailing, drawing, and documentation (20%)
Computation, Prototyping, Fabrication and Installation (50%)

Prerequisites:
None

Textbooks/Learning Resources:
Gödel, Escher, Bach: An Eternal Golden Braid (commonly GEB)
Anima Mundi is a 1992 short documentary film directed by Godfrey Reggio.
Koyaanisqatsi: Life Out of Balance, is a 1982 film directed by Godfrey Reggio with music composed by Philip Glass and cinematography by Ron Fricke.
http://www.dezeen.com/
http://www.contemporist.com/
http://designreform.net/
http://curbly.com/
http://www.architonic.com/
http://remodelista.com/
http://www.architonic.com/

Offered:
Spring only; annually

Faculty assigned:
Mark Bearak (Adjunct)
Brigette Borders (Adjunct)

A4670, Design/Build Workshop, 3 credits

Course Description:
The workshop will design a complete renovation of approximately 1500 sf of Fayerweather Hall, to be used by the Urban Design students and faculty. Students successfully completing the design portion of the workshop will be given priority in a summertime work-study effort to build the design.

Course Goals & Objectives:

- The design build workshop will encourage the development of design intelligence based on the student's sense of his or her own instrumentality. It is understood that the instrumental aspects of one's own body are revealed in the act of construction.

Student Performance Criterion addressed:
N/A

Topical Outline:
Drawing and other representational techniques (60%)
Material Research (20%)
Sample Detail Modelling (20%)

Prerequisites:
None

Textbooks/Learning Resources:
Film, Infinite Space, the work of John Lautner

Offered:
Spring and Summer only; annually.

Faculty assigned:
Robert Marino (Adjunct)
Mark Taylor (Adjunct)

A4612-A4615-A4676, Architectural Photography I & II, 1.5 credits each

Course Description:
Architectural photography as a tool for understanding the creator - the architect -'s ideas and intentions, and can provide us with insights into a building's meaning.

Course Goals & Objectives:
- Photo I is largely an introductory course, while Photo II delves more thoroughly into the discipline. A4615 in the Spring semester also begins to explore night photography.
- Students will explore the medium of architectural photography as a critical tool for analyzing and representing buildings.
- Students will learn to understand the intent behind design processes by contextualising and framing the relationship between an architect and his/her work.
- Students will learn to use photography not only as documentary evidence, but also as a stimulant for the critical mind.
- Students, as soon-to-be architects, learn what to expect and what to desire from the documentation of buildings they might design in the future.
- Each class is led as an open critique tailored to individual strengths and interests of the students.
- Student is expected to produce work for every class for review.
- Student will discuss and incorporate the work of past and contemporary landscape and architectural photographers, drawing from their example and talent for inspiration.
- Student will build up and present a portfolio of images, which formed a body of work that is an expression of their individual photographic vision as developed throughout the course.

Student Performance Criterion addressed:
N/A

Topical Outline:
Photography Field Work (60%)
Class Discussion (40%)

Prerequisites:
None

Textbooks/Learning Resources:
Selected books in Avery Library

Offered:
A4676 Fall & Spring; annually
A4612 Fall; annually
A4615 Spring;annually

Faculty assigned:
Erieta Attali (Adjunct)

A4684, Sustainable Design, 3 credits

Course Description:
Introduction to the technical and design challenges of sustainable architecture. Class instruction focuses on thermal comfort, sustainable siting, envelope, passive heating and cooling, shading, ventilation, daylighting, indoor air quality and mechanical systems. Students learn the individual lessons and then apply them incrementally to their developing design of a Bio-Dwelling, located on the same site in one of four typical climates.

Course Goals & Objectives:
- Students to learn the design implications and potentials of the individual sustainable initiatives and apply them to a developing building design.
- Students to integrate the individual initiatives and their often-conflicting objectives (daylighting vs. solar heat gain) into a coherent energy and poetic architectural response.
- Student to develop appreciation of and comfort with appropriate sustainable design options for different climates.
- Student to develop appreciation for human thermal comfort as the key functional objective of sustainable design but also as a direct reminder of the broader humanist objective of architectural design.

Student Performance Criterion addressed:
B.3. Sustainability
B.8. Environmental Systems

Topical Outline:
Sustainable design strategies and technical systems acquisition: (40%)
Sustainable design integration (60%)

Prerequisites:
None

Textbooks/Learning Resources:
Classnotes by Davidson Norris
Textbook: *Sun, Wind & Light, Architectural Design Strategies*, 2ndedition, Brown, G. and DeKay, M., Wiley
On reserve: extensive related readings

Offered:
Fall only; annually.

Faculty:
Davidson Norris (Adjunct)

A4705, Architecture After 1945, 3 credits

Course Description:
This lecture course addresses key developments in architecture during the period from the end of World War II until the early 1990s, paying attention to how architects and architectural institutions engaged historical transformations in the aesthetic, socio-economic, political, material, and technological realms, including the impact upon the discipline of globalization and the emergence of the information age.

Course Goals & Objectives:

- Students will gain an understanding of the recent history of the discipline and the profession and the historical reasons for significant changes to both.
- Students will learn about both key figures in the field of architecture and other less-known but important contributions to it.
- Students will develop reading and writing skills specific to the historical study of architecture and learn how to analyze architectural work from many perspectives.
- Students will gain an understanding of the relation between contemporary architecture and that of earlier historical periods.
- Students will have the opportunity to undertake a detailed research paper allowing them to develop research skills in both libraries and archives.

Student Performance Criterion addressed:
A.9. Historical Traditions and Global Culture

Topical Outline:
Lectures include: Introduction: The Machine Age and After; Postwar Britain: From Austerity to Aesthetics of Plenty; Emergence of Team 10 out of CIAM; Good Design and Other Legacies of Modernism; Late Modern Formalism; Fabrication, Information, Method; Megastructure and Metabolism; Experimental, Environmental, Alternative; Other Modernisms, Other Departures; Neo-Realism, Radicalism, Neo-Rationalism; Pop, Post-functionalism, and the Semantic Turn; Postmodernism; Program/Event/ Information

Prerequisites:
None

Textbooks/Learning Resources:
Extensive readings available to students via Courseworks. There is not a single textbook used for this course, but tailored primary and secondary sources.

Offered:
Fall only; annually. (Occasionally Spring)

Faculty:
Felicity D. Scott (F/T)

A4707, Digital Detailing: Simulation & Analysis, 3 credits

Course Description:
The class presents a framework for robust prototyping using a plurality of software to encourage students' proposals through multiple stages of design, prototyping, and simulation.

Course Goals & Objectives:
- Students develop a critical approach to the use of simulation tools.
- Students critically examine the gap between digital approximations and real world physical processes
- Students learn to use simulation tools and apply them to design problems
- Evaluate new software, utilities and protocols for design analysis and simulation
- Students learn to document work in a technical format meeting publications standards (eg. for submission to ACADIA or other)

Student Performance Criterion addressed:
A.11. Applied Research

Topical Outline:
Lectures in simulation techniques, computational/mathematical basis, and applications in design field (20%)
Software Workshops covering simulation tools (40%)
Individual and Group Discussion (25%)
Reviews (15%)

Prerequisites:
None

Textbooks/Learning Resources:
Performative Architecture: Beyond Instrumentality, Kolarevic, Branko
Architecture in the Digital Age: Design and Manufacturing, Kolarevic, Branko
Computer Aided Architectural Design, Bill Mitchell 1977
Natural Frequency Blog, Marsh, Andrew
Class Wiki (workshop materials, shared files)

Offered (semester and year):
Fall only; annually

Faculty assigned:
Mark Collins (Adjunct)
Toru Hasegawa (Adjunct)

A4711, Search: Advanced Algorithmic Design, 1.5 credits

Course Description:
The class surveys different computational approaches to form generation/evolution, including automata, physics-based systems, agent systems, data mining and interactivity. Workshops in programming supplement the critical approach.

Course Goals & Objectives:
- Students develop a critical approach to computational design
- Students receive a survey of algorithmic techniques in architectural design
- Students learn to program through a series of intensive workshops
- Students apply what they have learned by developing a design proposal through computational tools

Student Performance Criterion addressed:
A.3. Visual Communication Skills
A.11. Ordering Systems Skills

Topical Outline:
Lectures in computing themes, approaches and platforms (15%)
Programming Workshops (60%)
Individual and Group Discussion (25%)

Prerequisites:
None

Textbooks/Learning Resources:
Processing.org
Class Wiki (workshop materials, shared files)

Offered:
Fall and Spring; annually

Faculty assigned:
Mark Collins (Adjunct)
Toru Hasegawa (Adjunct)

A4715, ReThinking BIM, 1.5 credits

Course Description:
The place of BIM in architecture--highlighting whether BIM is solely meant for production, or if architectural design might benefit from the real time feedback available from Building Information Models.

Course Goals & Objectives:
- Students will develop a thorough understanding of BIM, separating this process from strictly a tool of efficiency to that of a design medium.
- Students will generate parametric architectural systems with embedded variability.

Student Performance Criterion addressed:
A.4. Technical Documentation

Topical:
Theory of BIM in architecture—contemporary practices (15%)
Design exploration and process research (40%)
Parametric design and BIM techniques and practices (45%)

Prerequisites:
None

Textbooks/Learning Resources:
Eastman, Chuck. *BIM Handbook: A Guide to Building Information Modeling* (Wiley. 2008)
Deamer, Peggy. Bernstein, Phillip. *Building (In) The Future: Recasting Labor In Architecture* (Princeton Architectural Press. 2010)

Offered:
Fall and Spring; annually

Faculty assigned:
Mark Green (Adjunct)

A4718, Cinematic Communication, 1.5 credits

Course Description:
This course focuses on using digital video as a vehicle for learning to communicate experiential concepts through narrative and the moving image.

Course Goals & Objectives:
- Students will learn basic and intermediate techniques for video production using consumer-grade equipment.
- Students will learn to communicate spatial ideas via narrative and cinematic techniques.
- Students will engage in thoughtful discussion regarding their video work and the work of others.

Student Performance Criterion addressed:
A.3. Visual Communication Skills

Topical Outline:
Video production (50%)
Discussion (50%)

Prerequisites:
None

Textbooks/Learning Resources:
Bloch, Christian. *The HDRI Handbook* (Rocky Nook. 2007)
Brinkmann, Ron. *The Art and Science of Digital Compositing* (Morgan Kaufmann. 1999)
Katz, Steven. *Film Directing Shot by Shot* (Michael Wiese Productions. 1991)
Kracauer, Sigfried. *Theory of Film* (Princeton University Press. 1997)
Shepheard, Paul. *What is Architecture?* (MIT Press. 1994)

Offered:
Fall and Spring; 2012

Faculty assigned:
John Szot (Adjunct)

A4718, Faking It, 1.5 credits

Course Description:
This course focuses on using digital video as a vehicle for learning to communicate experiential concepts through narrative and the moving image.

Course Goals & Objectives:

- Students will learn basic and intermediate techniques for video production using consumer-grade equipment.
- Students will learn to communicate spatial ideas via narrative and cinematic techniques.
- Students will learn advanced rendering techniques for video productions.
- Students will engage in thoughtful discussion regarding their video work and the work of others.

Student Performance Criterion addressed:
A.3. Visual Communication Skills

Topical Outline:
Video production (50%)
Discussion (50%)

Prerequisites:
None

Textbooks/Learning Resources:
Bloch, Christian. *The HDRI Handbook* (Rocky Nook. 2007)
Brinkmann, Ron. *The Art and Science of Digital Compositing* (Morgan Kaufmann. 1999)
Dobbert, Tim. *Matchmoving: the Invisible Art of Camera Tracking* (Sybex. 1995)
Kracauer, Sigfried. *Theory of Film* (Princeton University Press. 1997)

Offered:
Fall and Spring; 2011

Faculty assigned:
John Szot (Adjunct)

A4720, Meshing, 3 credits

Course Description:
The goal of this class is to develop parametric and logical design thinking using Rhino's Grasshopper. The student will construct parametric systems based on fundamental geometric concepts common to all parametric and logical design.

Course Goals & Objectives:
- Students will learn to understand fundamental geometric primitives in order to build complex parametric systems using logical relationships of part to whole.
- Students will learn to control their designs through application of logical and mathematical relationships and geometric dependencies.

Student Performance Criterion addressed:
A.4. Technical Documentation
A.8. Ordering System Skills

Topical Outline:
Fundamental Geometric Primitives (30%)
Logical and Mathematical Relationships (70%)

Prerequisites:
None

Textbooks/Learning Resources:
Downey, Zach. designalyze.com blog
Fano, David. design-reform.net blog

Offered:
Spring only; annually

Faculty assigned:
Zach Downey (Adjunct)

A4720, Meshing, 1.5 credits

Course Description:
This workshop will challenge traditional methods of drafting and physical model building and explore a more parametric approach. Virtual 3d models will be subjected to iterative transformations and tested for design fitness.

Course Goals & Objectives:
- Students will gain a practical knowledge of how certain geometries affect the performance of design.
- Understanding parametrics, geometry types, advanced modeling techniques, modeling relationships, recycling geometry, exporting techniques, and data extraction for fabrication.
- Students will learn how to embed intelligent criteria to produce more controlled and specific results.

Student Performance Criteria addressed:
A.4. Technical Documentation
A.8. Ordering Systems Skills

Topical Outline:
Parametric and other intelligent iterative modeling techniques (70%)
Virtual presentation techniques (30%)

Prerequisites:
None

Textbooks/Learning Resources:
None

Offered:
Fall and Spring; annually

Faculty assigned:
Mark Green (Adjunct) - Fall
Zach Downey (Adjunct) - Spring

A4726, Other Design, 3 credits

Course Description:
This is a class about making diagrams; visualizing information and giving form to concepts. We will also investigate how the development of the diagram itself could be generative and impact the forms that rise from it.

Course Goals & Objectives:
- Students will work on how specific concepts as visualized as well as minute issues of typography, form, line weight and color through weekly assignment.
- Students will present weekly assignments and take part in class discussions.
- Students will work on a more complex final assignment, using their studio projects as content.
- Students will attend lectures given by various practicing designers.

Student Performance Criterion addressed:
A.3. Visual Communication Skills

Topical Outline:
Weekly Assignments & Review (30%)
Final Assignment & Review (30%)
Lectures (40%)

Prerequisites:
None

Textbooks/Learning Resources:
Robert Bringhurst, *The Elements of Typographic Style*, Vancouver: Hartley & Marks, 1996
Walter Herdeg, *Graphis Diagrams*, Zurich: Graphis Press, 1983
Edward Tufte, *The Visual Display of Quantitative Information*, Chesire: Graphics Press, 1983
Edward Tufte, *Visual Explanations*, Chesire: Graphics Press, 1997
Edward Tufte, *Beautiful Evidence*, Chesire: Graphics Press, 2006
Anthony Vidler, *Diagrams of Diagrams: Architectural Abstraction and Modern Representation*, in Representations 72, Berkeley: University of California Press, 2000
Stan Allern, *Diagrams Matter*, in ANY 23, New York: Anyone Corporation, 2000

Offered:
Spring only; annually.

Faculty assigned:
Michael Rock (Adjunct)

A4731-A4732, Adaptive Formulations I & II, 3 credits total

Course Description:
Advanced parametric design and integrated fabrication methods using CATIA as a primary platform.

Course Goals & Objectives:
- Understand the role parametrics and automation in contemporary building and fabrication
- Mastery of the fundamentals of CATIA
- Explore the use and adaptation of advanced digital modeling methods as a design tool

Student Performance Criteria addressed:
A.4. Technical Documentation
A.8. Ordering Systems Skills

Topical Outline:
Weekly assignments and presentations (40%)
Final design project (60%)

Prerequisites:
None

Textbooks/Learning Resources:
Online video tutorials
Select readings

Offered:
Varies; annually

Faculty assigned:
Adam Modesitt (Adjunct)
Neil Thelen (Adjunct)
Ian Keogh (Adjunct)

A4722, Network City, 3 credits

Course Description:
This seminar presents the history of the American city since the 1880s by looking at the interaction of infrastructure, architecture, economy, politics and planning.

Course Goals & Objectives:
- Students will understand the history and development of the modern American city
- Looking at specific examples, both in class and in their projects, students will explore how works of architecture, particularly the office building, integrate into the city, infrastructure, economy, and politics.
- Students will explore forms of visual communication, using software for long document layout to carry out their argument.
- Students will learn to read texts critically.

Student Performance Criteria addressed:
A.1. Communication Skills
A.9. Historical Traditions and Global Culture

Topical Outline:
Drawing, layout and other representational techniques (35%)
Critical thinking and writing (65%)

Prerequisites:
None

Textbooks/Learning Resources:
Online reader at Columbia's Courseworks

Offered:
Spring only; annually

Faculty assigned:
Kazys Varnelis (Adjunct)

A4741, Field of Play, 1.5 credits

Course Description:
This class engages GIS as the primary platform for collecting, creating, interpreting, and representing 2D and 3D geographic data in service of architectural design.

Course Goals & Objectives:
- Students learn fundamentals of geographic data mapping and representation including understanding projection, scale, and orientation, map export, symbology and geometric functions.
- Students learn techniques for manipulation of symbology for appropriate and clear communication of geographic data.
- Students learn to implement data mapping techniques in 2D and 3D digital environments
- Students learn procedures for integrating GIS data and mappings with other design and representation software such as Adobe, AutoCAD, Rhinoceros, 3DStudioMax.
- Students learn techniques for collecting data via external GPS device data collection, shapefile manipulation, and manual data creation through drawing, in the context of site analysis.
- Students learn techniques for data translation between multiple modes such as vector data and raster data and multiple topologies such as point, line, surface, and mesh networks.
- Students learn how to generate 3D geometry from numerical datasets
- Students gain an overall understanding of interrogating the urban environment qualitatively through quantitative data analysis of site.

Student Performance Criteria addressed:
A.4. Technical Documentation
A.11. Applied Research

Topical Outline:
Research – 5%
2D Data Mapping (30%)
3D Data Mapping (30%)
Data collection (15%)
Data Translation (10%)
Graphic Presentation (10%)

Prerequisites:
A4535 Fundamentals of Digital Design

Textbooks/Learning Resources:
Maantay, Juliana and John Ziegler. *GIS for the Urban Environment*, ESRI 2006
Guallart, Vicente. *Geologics: Geography Information Architecture.* ACTAR 2009

Offered:
Fall and Spring; annually.

Faculty assigned:
Brian Brush (Adjunct)

A4747, Parametric Realizations, 1.5 credits

Course Description:
The course examines the process of turning parametric models into physical realities. Students will design a product as the physical realization of their scripted protocol.

Course Goals & Objectives:
- Students will work in groups to design and fabricate a product that will be the physical realization of their scripted protocol.
- Groups will develop mathematical algorithms using parametric modelers such as Rhino.script and Grasshopper.
- Concurrently students will be testing modeling techniques in order to create a prototype for their final physical system.
- Students will then take their digital models, rationalize them, and physically construct the system using a material process from their prototype.

Student Performance Criterion addressed:
A.11. Applied Research

Topical Outline:
Drawing and other representational techniques (20%)
Presentation skills (10%)
Technical detailing, drawing, and documentation (20%)
Computation, Prototyping, Fabrication and Installation (50%)

Prerequisites:
None

Textbooks/Learning Resources:
Gödel, Escher, Bach: An Eternal Golden Braid (commonly GEB)
Anima Mundi is a 1992 short documentary film directed by Godfrey Reggio.
Koyaanisqatsi: Life Out of Balance, is a 1982 film directed by Godfrey Reggio with music composed by Philip Glass and cinematography by Ron Fricke.

http://www.dezeen.com/
http://www.contemporist.com/
http://designreform.net/
http://curbly.com/
http://www.architonic.com/
http://remodelista.com/
http://www.architonic.com/

Offered:
Fall and Spring; annually

Faculty assigned:
Mark Bearak (Adjunct)
Brigette Borders (Adjunct)

A4748, Special Topics in Fabrication: Formworks, 1.5 credits

Course Description:
In "Formworks", students hybridize methods of casting with digital fabrication, developing a parametric, dynamic casting system and producing a series of precast elements using that system.

Course Goals & Objectives:
- Research significant built projects using formworks
- Understand the components and functions of formworks
- Gain competence in digital fabrication software and machines
    - Integrate Rhino3d and Mastercam X in fabrication workflow
    - CNC 3-axis routers: capabilities and constraints of endmills, millable materials, max milling depth
    - 3d printing techniques: study modules and system at small scale
- Produce high-quality castings in sufficient quantities to test a variety of aggregations using full scale cast modules.
- Develop sophisticated approaches to the use of repetition in precast systems. Produce modules and/or systems that are non-repetitive
- Representation Techniques. Formworks are presented as:
    - Exploded Axon of formwork with labeled parts
    - System Combinatorics: Show possibilities of system
    - System Sections: represent system tectonics
    - Documenting Process: show success, failures, techniques and materials
    - Performance and Program: Integrate rendering and drawing techniques to convey architectural performance and micro-programming of pre-cast system

Student Performance Criterion addressed:
A.11. Applied Research
B.12. Building Materials and Assemblies

Topical Outline:
Precedent Research (5%)
Digital techniques (30%)
Casting and fabrication (40%)
Drawing and other representational techniques (25%)

Prerequisites:
None

Textbooks/Learning Resources:
Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture, Kenneth Frampton
*Making It: Manufacturing Techniques for Product Design***,** Chris Lefteri

Offered:
Fall and Spring; annually.

Faculty assigned:
Joshua Draper (Adjunct)

A4752, Swarm Intelligence, 3 credits total

Course Description:
This seminar examines the role of agency within generative design processes. The course engages algorithmic techniques in the development of a computational methodology based on the logic of swarm intelligence

Course Goals & Objectives :
- Students will explore algorithmic techniques.
- Students will develop an understanding of computational design and it's relationship to complexity theory and architecture

Student Performance Criterion addressed:
N/A

Topical Outline:
Algorithmic techniques (50%)
Algorithmic design (50%)

Prerequisites:
None

Textbooks/Learning Resources:
Theraluaz et al. *Self-Organisation in Biological Systems(Princeton University Press, 2001).*

Offered:
Fall only; annually

Faculty assigned:
Roland Snooks (Adjunct)

A4753-A4757, Life & Support, 3 credits total

Course Description:
'Life Support' uses vacuforming techniques to fabricate full scale aquaponic ecosystems. This two-course sequence will focus on digital and manual fabrication techniques to design of inter-species relationships.

Course Goals & Objectives:
- Students will learn about the management of ecological systems and conduct hands-on tests by creating and managing a small-scale aquaponic system. Systems knowledge will cover hydrodynamics, water chemistry, lighting, filtration, plant and fish types, and feeding and nutrient cycles.
- Students will gain basic knowledge about the history and theory of ecology in relationship to architectural practice.
- Students will learn full-scale fabrication techniques including casting, seal design and fabrication, digital fabrication techniques, and vacuforming; and conduct hands-on tests with these methods in the construction of a full-scale aquaponic device.
- Work directly with guest experts in aquaponic systems management.

Student Performance Criterion addressed:
A.11. Applied Research
B.3. Sustainability

Topical Outline:
Class Participation and Reading Responses 10%
Experimentation with aquaponic and fabrication system 40%
Final assembly and fabrication of aquaponic system 50%

Prerequisites:
None

Textbooks/Learning Resources:
Desktop Aquaponics, Nelson/Pade Multimedia
Donald Worster, The Economy of Nature, pp.340-420
Tenhoor, Meredith, “The Architect's Farm,” in Above the Pavement – the Farm!

Offered:
Spring; 2011

Faculty assigned:
Josh Draper (Adjunct)
Janette Kim (Adjunct)

A4770, Neo-Conceptual: Art Politics and Architecture 1972-1996, 3 credits

Course Description:
The seminar will examine neo-conceptual art and production during the rise and height of conservative American politics. Neo-Conceptualists' works often engaged ideas such as anti-commodification, mass media, identity, social commentary, and/or political critique through the deployment of installation art, performance art, and video / electronic art with the goal of constructing new subjectivities and the (re)spatializing the *everyday* perception of cultural landscapes.

Course Goals & Objectives:
- The material covered in this course offers students proficiency in the following subject areas:
- Ability to speak and write effectively on subject matter contained in the professional curriculum
- Ability to employ appropriate representational media, including computer technology, to convey essential formal elements at each stage of the programming and design process
- Ability to make a comprehensive analysis and evaluation of a building building complex, or urban space
- Ability to identify and assume divergent roles that maximize individual talents and to cooperate with other students when working as members of a design team and in other settings

Student Performance Criterion addressed:
N/A

Topical Outline:
Preparation and in class seminar presentation (40%)
Fifteen Page Research Paper (45%)
Class Participation, Progress, Effort (15%)

Prerequisites:
None

Textbooks/Learning Resources:
Course Reader

Offered:
Fall only; annually

Faculty assigned:
Mario Gooden (F/T)

A4776, Man, Machine, and the Industrial Landscape, 3 Credits

Course Objectives:
The course investigates strategies where industrial technologies and/or landscapes might be re-calibrated to serve future infrastructural networks that imagine new relationships with the public.

Course Goals & Objectives:
- To gain an understanding of the means and methods of industrial activities ranging from mining to waste management with a focus on current techniques of material extraction, refinement, and redistribution.
- To visit active industrial sites such as a refinery, power plant, distribution center, and waste facility.
- To meet artists and engineers influencing industrial practices.
- To produce writings and drawings analyzing and re-imagining the current state and potential futures of student chosen industrial processes and site.
- To develop a thesis for why and how architects might intervene in the post-industrial environment.

Student Performance Criterion addressed:
B.3. Sustainability

Topical Outline:
Research (30%)
Writing (15%)
Representational Techniques (40%)
Presentation Skills (15%)

Prerequisites:
None

Textbooks/Learning Resources:
Stan Allen, *Infrastructural Urbanism.* Points + Lines: Diagrams and Projects for the City. New York: Princeton Architectural Press. 1999. 46-57.
Hillary Brown, *Infrastructural Ecologies: Principals for Post Industrial Public Works.* Places – The Design Observer Group, November 25, 2010
Edward Tufte, *The Fundamental Principles of Analytical Design.* Beautiful Evidence. Cheshire: Graphics Press LLC. 2006. pp. 122-137.
Pierre Belanger, *Landscapes of Disassembly,* Landscape Journal 28:1-09. pp. 80-95.
Brian Hayes, *The Refinery.* Infrastructure: The book of Everything for the Industrial Landscape, New York: W.W. Norton & Company Inc. 2005. pp. 186-201.
Steven Rock, *Phytoremediation: Integrating Art and Engineering through Planting.* Manufactured Sites: Re-Thinking the Post Industrial Landscape, ed. Niall Kirkwood. New York: Taylor & Francis. 2001. pp. 52-60.

Offered:
Fall Only; annually

Faculty:
Sean A. Gallagher (Adjunct)

A4781, Surface, Screen & Structure, 3 credits

Course Description:
This course focuses on the design and digital fabrication of sun screening systems. The screens will per form as ornamental expression and functional shading systems. Students design thoughtful solutions that are graphic, spatial and creatively resolve light transmittance and structural requirements.

Course Goals & Objectives:
- Utilize Rhino as generative modeling tools in order to design a screening system that is responsive to the material capabilities of metal, natural and artificial light transmittance and CNC machine techniques.
- Review design work with David Bott, a structural engineer, to analyze the forces that will act globally upon your cladding system as well as locally at each joint or connection.
- Use Solidworks to create an accurate parametric model, materially and structurally, of a single connection detail
- Digitally fabricate two stainless steel prototypes using Maloya Laser and the CNC routers available at the GSAPP

Student Performance Criteria addressed:
A.4. Technical Documentation
B.10. Building Envelope Systems
B.12. Building Materials and Assemblies

Topical Outline:
Detailing and digital modeling (40%)
Shop drawings and fabrication skills (60%)

Prerequisites:
None

Textbooks/Learning Resources:
None

Offered:
Fall only; annually

Faculty assigned:
Reto Hug (Adjunct)
Joseph Vidich (Adjunct)

A4782, Fast Forward, 1.5 credits

Course Description:
This course focuses on the development of interactive, rendered environments and mood -based visualization techniques using real time rendering technology through a virtual reality interface.

Course Goals & Objectives:

- Students will explore the use of color, material effects and lighting to construct digital environments that evoke their chosen moods and emotions.
- Students will employ digital modeling and real time rendering technology to progress beyond the still image and onto the creation of interactive digitally rendered environments to make the design process more accessible to a chosen audience or client.
- Each student will develop organizational strategies to create digitally rendered environments that are user friendly and can be manipulated easily by other designers through a few key control parameters.
- Each student will be evaluated on the innovation of the project's form and how successfully it exhibits connection to the human body through material articulation and the development of scalar relationships.
- Students will engage in an exponential learning process by producing video tutorials presenting the techniques of visualization developed within their virtual models. These videos become vital learning tools for future designers.
  .

Student Performance Criterion addressed:
N/A

Topical Outline:
Concept Development / Mood Image Boards (10%)
Digital Modeling Skills (25%)
Digital Rendering Techniques - Still Image (15%)
Digital Rendering Techniques – Real Time Virtual Interface (30%)
Post Production Image Enhancement Techniques (10%)
Video Tutorial Creation / Presentation Techniques (10%)

Prerequisites:
None

Textbooks/Learning Resources:
Eggert, Enrico and Markus Kuhlo. *Architectural Rendering with 3DS Max and Vray.* (Focal Press. 2010)
Harper, Jeffrey and Mark Gerhard. *Mastering 3DS Max Design 2011.* (Sybex. 2010)
Onstott, Scott. *Enhancing Architectural Photos and Models with Photoshop.* (Sybex. 2010)
Vray Material Resource: www.vraymaterials.de
Vray Rendering Online Textbook Resource: http://www.spot3d.com/vray/help/150SP1

Offered
Fall; 2010-2011 and Spring; 2011-2012

Faculty assigned:
Jason Ivaliotis (Adjunct)

A4783, Workflow; Designing Industry, 3 credits

Course Description:
This class explores the application of digital technology as a tool of communication to form networks of design collaboration that are redefining architectural practice and its position within industry.

Course Goals & Objectives:
- Students learn about the current trends in the design and building industry in relation to digital technology
- Students envision new forms of design practice utilizing the potential of digital technology to transform outdated methods of design and construction

Student Performance Criterion addressed:
A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
C.3. Client Role in Architecture
C.4. Project Management
C.5. Practice Management
C.6. Leadership
C.7. Legal Responsibilities
C.8. Ethics and Professional Judgement

Topical Outline:
Drawing and other representational techniques (15%)
Presentation skills (15%)

Prerequisites:
None

Textbooks/Learning Resources:
Class Webpage / Blog with select articles and online resources:
http://gsappworkflow2011.wordpress.com/

Offered:
Fall only; annually

Faculty assigned:
Scott Marble (Adjunct)

A4784, Representational Theories & Techniques, 1.5 credits

Course Description:
This course asks each student to create their own set of representations analyzing and exploring the relationships between historical techniques and contemporary digital techniques in architectural representations.

Course Goals & Objectives:
- Students will become critically aware of the history and theory of recent architectural representations.
- Students will learn to analyze representational techniques
- Students will creatively apply this understanding to their own representational work.

Student Performance Criterion addressed:
A.3. Visual Communication Skills

Topical Outline:
Drawing and other representational techniques (60%)
Reading & Discussion (40%)

Prerequisites:
None

Textbooks/Learning Resources:
Weekly Assigned Readings

Offered:
Fall only; annually

Faculty assigned:
Michael Young (Adjunct)

A4788, Modular Architecture: Strategy, Technology, Design, 3 credits

Course Description:
Modular architecture, has enjoyed a recent resurgence of interest. Through a combination of studio work, lectures, reading, and a factory visit, students will become versed in modular design and technical principles.

Course Goals & Objectives:
- Design a multi-story urban building using a modular system. Emphasis on conceptual rigor and technical resolution.
- Final presentation in the form of plans, sections, elevations, details, perspective views, and 3D analytical drawings.
- Based on reading, class discussion, and writing, consider modular architecture from a critical perspective, and speculate on topics such as:
  - How would the role of the architect evolve if an industrialized approach to building were to predominate?
  - How would the widespread adoption of modular architecture affect architectural creativity?
  - Can it be a tool for urban revitalization?
  - Is it adaptable to a range of climates?
  - Does it offer sustainable solutions?

Student Performance Criterion addressed:
A.4. Technical Documentation
B.3. Sustainability
B.8. Environmental Systems
B.9. Structural Systems
B.10. Building Envelope Systems
B.11. Building Service Systems
B.12. Building Materials and Assemblies

Topical Outline:
Final presentation: design (35%)
Final presentation: technical development (35%)
Class participation (15%)
Paper (15%)

Prerequisites:
A4115 Architectural Technology V

Textbooks/Learning Resources:
N/A

Offered:
Fall only; annually.

Faculty assigned:
David Wallance (Adjunct)

A4791, Futures of the Past, 1.5 credits

Course Description:
Introduction to issues of proliferation, archiving, and retrieval of the architectura image. Design and prototype-based exploration of techniques for computationa analysis, recognition, and display of images.

Course Goals & Objectives:
- Students gain applied knowledge of specialized software skills, including object-oriented programing, simple electronics, and component assembly.
- Students gain hands-on experience to combine software with hardware in order to create their own multi-touch screen and custom interactive experience.
- Students gain exposure to historically significant archival photographs and prints while digitally synthesising them with present day technology.

Student Performance Criterion addressed:
A.11. Applied Research

Topical Outline:
Software (40%)
Hardware (50%)
Historical Images (10%)

Prerequisites:
None

Textbooks/Learning Resources:
Carole Ann Fabian, Director Avery Architectural and Fine Arts Library
Sean White, PhD - Smithsonian Institution Visiting Scientist, Columbia University Computer Graphics and User Interfaces Lab

Offered:
Spring 2010

Faculty assigned:
Kevin Wei (Adjunct)
Zachary Colbert (Adjunct)

A4792, Approaching Convergence, 1.5 credits

Course Description:
The course explores the integration of custom scripts within the Grasshopper plugir for Rhinoceros to access operations and open communication amongst a variety of software.

Course Goals & Objectives:
- Exploration of various geometry construction techniques in Grasshopper.
- Cross-platform communication using custom script modules and data streams.

Student Performance Criterion addressed:
A.11. Applied Research

Topical Outline:
Geometry construction techniques (40%)
Interoperational toolsets (40%)
Presentation skills (20%)

Prerequisites:
None

Textbooks/Learning Resources:
N/A

Offered:
Spring only; annually

Faculty assigned:
Biayna Bogosian (Adjunct)
Steven Garcia (Adjunct)

A4793, App-itecture, 1.5 credits

Course Description:
The class examines the potential of devices and applications to change the way we create and interact with the built environment.

Course Goals & Objectives:
- Students develop a critical approach to device culture and software tools.
- Students critically examine the relationship between tools and design products
- Students propose and prototype software applications that encourage novel and meaningful interactions between the physical and virtual environments.
- Students understand the software and hardware features of modern mobile SDKs that are especially relevant to architects, including GPS, cartography and other spatial technologies.

Student Performance Criterion addressed:
C.2. Human Behavior

Topical Outline:
Lectures in programming patterns and available technologies (20%)
Programming Workshops (60%)
Individual and Group Discussion (20%)

Prerequisites:
None

Textbooks/Learning Resources:
Apple Developer Support Library
Class Wiki (workshop materials, shared files)

Offered:
Spring only; annually.

Faculty assigned:
Mark Collins (Adjunct)
Toru Hasegawa (Adjunct)

A4798, Craft in the Digital Age, 1.5 credits

Course Description:
Familiarity with tools, techniques, and materials influences design and how we leverage new technologies. This class builds that knowledge of craft through hands-on exploration.

Course Goals & Objectives:
- Students will explore craft, developing a personal understanding of materials, tools, and techniques to greater inform the design process.
- Students will learn skills through hands-on exercises that require process driven critical thinking and design detailing derived from an understanding of craft.
- The final assignment is for each student to design and fabricate a piece of furniture that demonstrates an understanding of the material covered in the class.

Student Performance Criterion addressed:
A.11. Applied Research

Topical Outline:
Craft/woodworking based skills (100%)

Prerequisites:
None

Textbooks/Learning Resources:
Rae, Andy. *Working with Wood* (The Taunton Press. 2005)
Bird, Lonnie. *Using Woodworking Tools* (The Taunton Press. 2004)
Rogowski, Gary. *Joinery* (The Taunton Press. 2002)
A set of these books is available for student use in the Laboratory for Applied Building Science.

Offered:
Fall and Spring; annually

Faculty assigned:
Nathaniel Carter (Adjunct)

A4799, Montage City: Filmmaking as Urban Observation, 1.5 credits

Course Description:
This workshop teaches students the theory and practice of cinematic montage as a pro-active strategy of interpreting the built environment of cities and urban sites.

Course Goals & Objectives:
- Students produce short videos that analyze and represent essential qualities of a site (the sense of place) in terms of the social practices of a site's users (the use of space).
- Students learn how to represent existing site conditions through moving images.
- Students familiarize themselves with video editing technology.

Student Performance Criterion addressed:
A.3. Visual Communication Skills

Topical Outline:
Videography (20%)
Video Editing (60%)
Alternative site analysis methodologies (20%)

Prerequisites:
None

Textbooks/Learning Resources:
Lynch, Kevin and Gary Hack *Site Planning* (MIT Press, 1984) Antoine-Dunne, Jean, ed. *The Montage Principle* (Rotopi, 2004) Bosselmann, Peter *Representation of Places* (University of California, 1998)

Offered:
Fall and Spring; annually

Faculty assigned:
Cassim Shepard (Adjunct)

A4801, Encoded Matter, Workshop in Computational Craft, 1.5 credits

Course Description:
This seminar is devoted to the design and prototyping of architectural immersive environments. Students explore the use of computational languages and geometry in architectural design.

Course Goals & Objectives:
- Students explore all potential benefits of the application of computation in the conception, development and fabrication of an architectural proposal.
- Students learn how to produce their individual custom computational tools and automated procedures above and beyond the predefined constrains of digital drafting or modeling.
- Students engage closely with computational processes in order to develop an aesthetic and intuition of complexity that resides in a balance between design intent and emergent character.

Student Performance Criterion addressed:
A.3. Visual Communication Skills
A.8. Ordering Systems Skills

Topical Outline:
Computer coding and design (70%)
Prototyping and fabrication (20%)
Presentation skills (10%)

Prerequisites:
None

Textbooks/Learning Resources:
Complexity: A Guided Tour by Melanie Mitchell
A New Kind of Science by Stephen Wolfram
On Growth and Form by D'Arcy Wentworth Thompson
AD V76 Collective intelligence by Chris Perry and Christopher Hight
AD V76/2 Techniques and Technologies in Morphogenetic Design by Michael Hensel
Structural Stability And Morphogenesis by Rene Thom
Far From Equilibrium by Sanford Kwinter
Informal by Cecil Balmond

Offered:
Fall only; annually

Faculty assigned:
Ezio Blasetti (Adjunct)

A4803, The Dictionary of Received Ideas, 3 credits

Course Description:
Modeled upon Gustave Flaubert's unfinished project, *Le dictionnaire des idées reçues*, this seminar examines *received ideas*—formerly novel and currently stale ideas—in contemporary architecture.

Course Goals & Objectives:
- To detect, define and date *received ideas* prevalent over the past decade, in particular as design operations and conceptual strategies.
- To examine architectural projects as arguments. In other words, that an architectural project advances a position within the field.

Student Performance Criterion addressed:
A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills

Topical Outline:
Seminar Discussions (80%)
Seminar Presentations (20%)

Prerequisites:
None

Textbooks/Learning Resources:
Gustave Flaubert, "The Dictionary of Received Ideas," in Gustave Flaubert, *Bouvard and Pécuchet*, translated from the French by Mark Polizzotti, (Normal, IL: Dalkey Archive Press, 2005).

Offered:
Spring 2012

Faculty assigned:
Enrique Walker (F/T)

A4813, Integrated Parametric Delivery, 1.5 credits

Course Description:
This workshop will insist on interoperability between various design processes, magnifying the strengths of each method and tool. Investigations will focus on integrating multiple parametric tools simultaneously into a single architectural project.

Course Goals & Objectives:
- Students will explore various methods of design communication and presentation through techniques employed simultaneously through multiple platforms.
- Students will learn concepts and creative workflows for interoperable design methodologies.

Student Performance Criterion addressed:
A.3. Visual Communication Skills
A.4. Technical Documentation

Topical Outline:
- Parametric and other intelligent iterative modeling techniques (20%)
- Concepts of interoperability (50%)
- Presentation and design communication techniques (30%)

Prerequisites:
A4715 ReThinking BIM

Textbooks/Learning Resources:
Eastman, Chuck. *BIM Handbook: A Guide to Building Information Modeling* (Wiley. 2008)
Deamer, Peggy. Bernstein, Phillip. *Building (In) The Future: Recasting Labor In Architecture* (Princeton Architectural Press. 2010)

Offered:
Fall and Spring; annually

Faculty assigned:
Mark Green (Adjunct)

A4817, Binary Space Partition, 1.5 credits

Course Description:
This course introduces students to the use of real-time simulation software for illustrating architectural concepts and conducting a discussion on the meaning of virtual experiences.

Course Goals & Objectives:
- Students will learn basic and intermediate techniques for real-time environment simulation within the Unreal game engine.
- Students will produce theses on the relationship between reality and the real-time potential of the technology they are working with.
- Students will engage in thoughtful discussion regarding their video work and the work of others.

Student Performance Criterion addressed:
A.3. Visual Communication Skills

Topical Outline:
Learning to manipulate the simulation software (50%)
Presentations and discussion (50%)

Prerequisites:
None

Textbooks/Learning Resources:
Benedikt, Michael. *Cyberspace: First Steps* (MIT Press. 1992)
Busby, Jason. *Mastering Unreal Technology Vol. 1* (Sams. 2009)
Shepheard, Paul. *What is Architecture?* (MIT Press. 1994)

Offered:
Fall only; 2012.

Faculty assigned:
John Szot (Adjunct)

A6120, Architecture Bio-Synthesis: DNA, Buildings, and Innovation in the Century of Biology, 3 credits

Course Description:
This class offered a cutting-edge exploration of possibilities for collaboration between architects and synthetic biologists, including the design of new high-performance, sustainable building materials.

Course Goals & Objectives:
- Students will become familiar with the new field of synthetic biology and discuss the opportunities and risks of new technologies.
- Students will work in collaboration with students from the Department of Biology on lab experiments with bacterial colonies.
- Students will explore potential design applications, including the design of new building materials.

Student Performance Criterion addressed:
A.11. Applied Research

Topical Outline:
Research and seminar discussion (40%)
Lab experiments with biology students (30%)
Design proposal (30%)

Prerequisites:
None

Textbooks/Learning Resources:
N/A

Offered:
Fall only; annually

Faculty assigned:
David Benjamin (F/T)

A6145, Saturated Models – Low Res, 3 Credits

Course Description:
The exploration of a range of new technologies of material production, and how certain critical interactions with such can interrogate how we think architectural space.

Course Goals & Objectives:
- To link theoretical and philosophical explorations with material production.
- To understand a range of new means of material production.
- To construct means of questioning these new forms of production.
- To apply these means of questioning onto existing discourses/ knowledges.
- To appreciate how new means of production affect the production of architectural space.
- To learn how to formulate different 'resolutions' of questioning of such, meaning, the construction of orders/levels of formalization to existing and new modes of production.
- Students will learn methods of interrogating, and formalizing, their own ideas about the production of space – through these formalizations/ questionings of new technologies.
- Students will learn presentation skills to be used throughout their academic careers - not just representational, but the formalization of ideas, and how this can be productive of new materials of appreciation of architectural space and its production.

Student Performance Criterion addressed:
A.3. Visual Communication Skills

Topical Outline:
Formalization of methods of critique of student's existing ideas (30%)
Use and questioning of advanced production methods (40%)
Presentation skills (30%)

Prerequisites:
None

Textbooks/Learning Resources:
Graham Harman: *Time, Space, Essence* [Article]
Graham Harman: *Ferris Wheel* [Article]
Levi Bryant: *The Ontic Principle*, in 'Speculative Turn'
Ed Pluth: *Badiou: A Philosophy of the New*, [Chapters 4, 5, 6]
Levi Bryant: *Democracy of Objects*, [Introduction] {open access from www.openhumanitiespress.org}
Alain Badiou: *Second Manifesto for Philosophy*, [Chapters 1,2,3]
Graham Harman: *The Quadruple Object*
Graham Harman: *Bruno Latour, Prince of Networks*, [Chapter 7]
Graham Harman: *Realism without Materialism* [Article]
Mario Carpo: *Alphabet and the Algorithm*, [Chapter 1]

Offered:
Fall 2011

Faculty:
Alistair Gill (Adjunct)
Veronika Schmid (Adjunct)

A6160 Known Unknowns: Architecture's Ecological Consciousness, 3 credits

Course Description: This seminar investigates architecture's agency in the political ecology of climate change. We examine texts and design projects to investigate ecological models and theories of contemporary risk management.

Course Goals & Objectives:

- Students will read major texts outlining theories of ecology and risk in relationship to theories and design strategies in architecture and urbanism.
- Students will study and interpret design projects, identifying architectural design strategies and analytic techniques associated with each.
- Students will develop skills of critical critique and interpretation of major texts and projects in the discipline.

Student Performance Criterion addressed:
A.1. Communication Skills
A.3. Visual Communication Skills
B.3. Sustainability

Topical Outline:
Class Participation and Reading Responses (40%)
Class Presentation (10%)
Final Project: Contribution to an Atlas with written work and analytic diagrams (50%)

Prerequisites:
None

Textbooks/Learning Resources (selected):
Banham, Reyner, *Architecture of the Well-Tempered Environment (1984)*
Botkin, Daniel, *Discordant Harmonies: A New Ecology for the Twenty-First Century* (Oxford University Press, 1990)
Cronon, William, *Uncommon Ground; Rethinking the Human Place in Nature* (W.W.Norton & Co., 1995)
Gandy, Matthew, *Concrete and Clay* (MIT Press, 2002)
Landscape Urbanism Reader, Ed. Charles Waldheim (Princeton Architectural Press, 2006)
The Sustainable Urban Development Reader, Ed. Timothy Beatley (Routledge, 2004)
Worster, Donald, *Nature's Economy* (Cambridge University Press, 1994)

Offered:
Spring; 2012

Faculty assigned:
Janette Kim (Adjunct)

A6170, Architecture and the Sustainable Built Environment, **3 credits**

Course Description:
For non-architectural students. Introduction to the technical and design challenges of sustainable building design. Class instruction focuses on thermal comfort, sustainable siting, envelope, passive heating and cooling, shading, ventilation, daylighting, indoor air quality and mechanical systems. Students learn the individual lessons and then apply them incrementally to the development of a design brief/sustainable mission statement for a High School of Environmental Sciences, located in Central Park in NYC.

Course Goals & Objectives:
- Student to develop appreciation for human thermal comfort as the key functional objective of sustainable design
- Students to learn the design implications and potentials of the individual sustainable initiatives.
- Students to integrate the individual initiatives and their often-conflicting objectives (daylighting vs. solar heat gain) into a coherent energy program.
- Students to learn how to develop and communicate a technically complex environmental and architectural narrative, support by verbal and visual descriptions, precedent images and rough calculations.

Student Performance Criterion addressed:
B.3. Sustainability
B.11. Building Service Systems

Topical:
Sustainable design strategies and technical systems acquisition: (40%)
Sustainable design integration (60%)

Prerequisites:
None

Textbooks/Learning Resources:
Classnotes: Davidson Norris
Textbooks:
Sun, Wind & Light, Architectural Design Strategies, 2nd edition, Brown, G. and DeKay, M., Wiley
Heating, Cooling and Lighting, Sustainable Methods for Architects, 3rd edition, Lechner, N., Wiley

Offered:
Fall and summer; annually

Faculty:
Davidson Norris (Adjunct)

A6180, Architectural Practice as a Project, 3 credits

Course Description:
Course that explores the relationship between architectural design concepts, methods of work and communication. The group-work consists in the design of an architectura practice.

Course Goals & Objectives:
- to break the limits between “design tasks” and “service tasks” where architect’s work usually sways
- to learn presentation skills to be used throughout the professional practice
- Understand the principals of the design implications of business decisions and the vice versa.
- Understand the design and business strategy as to start thinking critically about business opportunities and issues in the framework of architecture. Understand and analyse the architecture practice processes depending on the different methods or working and organization.

Student Performance Criterion addressed:
C.5. Practice Management

Topical Outline:
Graphic resources to explain conceptual approaches. (50%)
Team group creativity and discussion (30%)
Presentation skills (20%)

Prerequisites:
None

Textbooks/Learning Resources:
Reference Authors and editors: Gutman, Rober;, Hubbard Jr., Bill; Saunders, William S.; Cuff, Dana; Latour, Bruno; Laurel, Brenda; Brown, Tim; Martin, Roger; Lockwood, Thomas and Walton, Thomas; Borja de Mazota, Brigitte; Design Management Institute. New York; Berlage Institute (“109 Provisional Attempts to Address Six Simple and Hard Questions about what Architects Today and where their Profession Might go Tomorrow”. Hunch 6/7)

Offered:
Spring only; annually

Faculty assigned:
Juan Herreros (F/T)

A6190, Rule vs. Freedom: Theoretical Explorations in European Architecture, 1670-1870, 3 credits

Course Description:
This seminar explores architecture theory from the late seventeenth century to the late nineteenth century, a period that challenged Renaissance canons for alternative theoretical foundations.

Course Goals & Objectives:
- To understand the historical transformation of architecture as a discipline by exploring fundamental theoretical texts which proposed new criteria for designing architecture.
- To read and write clearly and critically about theoretical issues in architecture.

Student Performance Criterion addressed:
A.1. Communication Skills
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity

Topical Outline:
Reading (45%)
Seminar discussion and class presentations (20%)
Short essays (35%)

Prerequisites:
None, although previous architectural history survey in the period is recommended

Textbooks/Learning Resources:
There are no text books from this course. Instead, students are asked to read a variety of primary sources by architects and theorists, including (Perrault, Laugier, Quatremère de Quincy, Burke, Piranesi, Boullée, Patte, Durand, Pugin, and Ruskin), as well as a few seminal critical interpretations of these texts.
Students are encouraged to look at first editions in Avery's rare book room.

Offered:
Fall only; bi-annually

Faculty assigned:
Mary McLeod (F/T)

A6195, Modernist Spaces, 3 credits

Course Description:
This seminar explores various interpretations of modernism from the perspectives of both architecture and literature, examining the confluences and contrasts between these two fields.

Course Goals and Objectives:
- To encourage thinking about how various historical forces of modernization, such as the efficiency movement, domestic reform, changing family patterns, mechanization of hygiene, have affected and shaped different disciplines.
- To write lucidly about cross-disciplinary issues related to modernism from the late nineteenth-century to World War II.

Student Performance Criterion addressed:
A.9. Historical Traditions and Global Culture

Topical Outline:
Reading of architectural and literary texts (50%)
Seminar presentations and discussion (20%)
Writing of essays and final paper (30%)

Prerequisites:
None

Textbooks/Learning Resources:
There is no text book for this course. Instead, each week literary (novels, short stories, essays, poems) and architectural texts (mostly primary) are assigned. These include texts by Oscar Wilde, E.M. Forster, Paul Scheerbart, Bruno Taut, Adolf Loos, Virginia Woolf, Le Corbusier, Eileen Gray, Walter Gropius, George Orwell, and Aldous Huxley.

Offered:
Spring; 2012.

Faculty assigned
Mary McLeod (F/T)
Victoria Rosner

A6232, Advanced GIS, 3 credits

Course Description:
This research seminar is meant to advance students' knowledge of tools available for spatial analysis - beyond those presented in A4577 Introduction to GIS.

Course Goals & Objectives:
- Learn how to develop research questions with a spatial component.
- Develop methodology for answering research questions with a spatial component.
- Learn Advanced GIS topics such as Network Analyst, Transportation and Landuse, Decision Making, Spatial Statistics and Interpolation, Remote Sensing, Web GIS and Basic Scripting
- Advance Student Knowledge in GIS

Student Performance Criterion addressed:
A.3. Visual Communication Skills

Topical Outline:
Scripting (20%)
Presentation skills (20%)
Research Methods (60%)

Prerequisites:
None

Textbooks/Learning Resources:
Various articles and readings not one text book, although there is a lot of material from the following resources:
Allen, David W., *Spatial Analysis Workbook : GIS Tutorial II*, ESRI Press 2009 ($50 on Amazon)
Mitchell, Andy, *The ESRI Guide to GIS Analysis Volume 2 : Spatial Measurements & Statistics*, ESRI Press 2005 ($20 on Amazon)
Carr, Margaret H. and Paul D. Zwick, *Smart Land-Use Analysis : The LUCIS Mode,* ESRI Press, Redlands, 2007 ($35 on Amazon)

Offered:
Spring; 2012

Faculty assigned:
Sarah Williams (F/T)

A6233, Crowd Sourced City, 3 credits

Course Description:
This class investigates how social media can be used for planning and advocacy with particular attention to developing their own strategies though client work.

Course Goals & Objectives:
- Gain a solid background in how social media and crowd sourcing are currently being used for city planning.
- Gain hands on experience with civic organizations that might be able to use social media and mobile technologies for their planning purposes.
- Learn to help planning organizations use the information they collect to advocate for their needs, by mimicking client based relationships.
- Prototype and implement actual mobile media strategies and critic results.

Student Performance Criterion addressed:
A.3. Visual Communication Skills
C.3. Client Role in Architecture
C.9. Community and Social Responsibility

Topical Outline:
Technology Skills (30%)
Prototyping (30%)
Developing Client Based Relationship (20%)
Presentation Skills (20%)

Prerequisites:
None

Textbooks/Learning Resources:
Various reading on technology and its use in planning and advocacy. No text books.

Offered:
Fall only; annually

Faculty assigned:
Sarah Williams (F/T)

A6241, Compromised Public Space, 1.5 credits

Course Description:
In order to evaluate the evolution of public space we look to the examples of post-socialist states as a road map from socialist to market-driven economic transition.

Course Goals & Objectives:
- Students take into consideration a public space in a BRIC nation in terms of the overlapping constituents operating in that field and taking into account the opportunistic dissonance discussed with the speaker presentation.
- Site maps, ownership histories, GIS information as well as information provided by the research teams of students working in groups of two, that chose and document case-study sites in a matrix that defines value in economic and cultural terms by focusing on the privatization parameters of public space.

Student Performance Criterion addressed:
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity

Topical Outline:
Class participation (50%)
Team presentations (50%)

Prerequisites:
None

Textbooks/Learning Resources:
This six-week seminar focuses on information provided by the professor and presentations defining public space and ownership in terms of different disciplines of study. Douglas Gauthier, Columbia University GSAPP; Dr. Gerald McDermott, International Business at the Darla Moore School of Business, University of South Carolina; David Stark, Arthur Lehman Professor of Sociology and International Affairs at Columbia University; Mary Wadsworth Darby, Morgan Stanley in Hong Kong as Vice President and China Business Manager, Josh Pristaw, Senior Managing Director at GTIS overseeing investment in Brazil.
A timeline of the political, economic and social transitions of the BRIC nations is provided along with site information of various locations proposed as case-studies.

Offered:
Spring 2011

Faculty:
Douglas Gauthier (Adjunct)

A6390, Post War Japanese Architecture, 3 credit

Course Description:
This course introduces post war Japanese architecture focusing 1960s economic growth and Metabolism, 1970s oil-shock and beginning of smaller interventions, 1985~1995 land derivative and hyper globalization,1995-the Great Kansai Earthquake to 911 and deep economic recess, and 2000s globalization of Japanese design.

Course Goals and Objective:
- Students will aware non-western way of seeing, thinking and making.
- Students will understand the world where feeling is more esteemed than reasoning.
- Students will understand Japanese architectural tradition and its sustainability, a Metabolism culture and tenacious rebuilding tradition.

Student Performance Criterion addressed:
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity

Topical Outlines:
Historical and geographical boundary of Japanese architecture (10%)
Post war crisis and rebuilding(10%)
1960s economic development and Metabolism (10%)
1970s oil shock and smaller intervention (10%)
1985-1995 derivative and globalization(10%)
Research on architects and their built form (50%)

Prerequisites:
None

Textbook/Learning Resources:
All the literature and graphics are stored with share-file of Columbia Course Works and downloadable.

Offered:
Fall only, annually.

Faculty assigned:
Kunio Kudo (Adjunct)

A6455, Vauban's Military Urbanism, 3 credits

Course Description:
This course studies how the approach and sheer quantity of Vauban's output in seventeenth century France condensed and catalyzed trends in all European cities that had been developing since the mid-fifteenth century. It concludes with a study of the impact of this approach to cities in the eighteenth and nineteenth centuries.

Course Goals:
- Producing graduate level research paper
- Honing critical reading skills
- Making history relevant to current practice

Student Performance Criterion addressed:
A.1. Communication Skills
A.9. Historical Traditions and Global Culture

Topical Outline:
Reading Responses (20%)
Paper - 15 pages (50%)
Seminar Presentation (20%)
Attendance and participation (10%)

Prerequisites:
A4348 History of Architecture I & A4349 History of Architecture II

Textbooks/Learning Resourses:
All articles available on *Courseworks*
Additional reading on reference shelf in Avery

Offered:
Fall only; 2010-2011

Faculty assigned:
Victoria Sanger (Adjunct)

A6769, Histories of American Cities, 3 credits

Course Description:
This class explores the volatile, seemingly chaotic yet cohesive forms of American cities, beginning with colonial-era origin myths, then focusing on the 20th-century metropolis.

Course Goals and Objectives:

- Research skills for tracing the urbanistic/landscape/infrastructure patterns that have been inscribed in contemporary American cities
- Chronological overview of the history of American cities, covering topics such as downtowns, urban/suburban housing, civic spaces, commercial districts, etc.
- An understanding of different professional perspectives on cities, including architects, planners, developers, preservationists, and officials – as well as their interactions with citizens
- Awareness of a variety of experiments, especially in cities outside New York, Chicago and Los Angeles

Student Performance Criterion addressed:
N/A

Topical Outline:
18th-19th-century cities (20%)
20th-century cities (70%)
Contemporary cities (10%)

Prerequisites:
None

Textbooks/Learning Resources:
Varied primary and secondary sources; handouts and “image bank” of 20-30 iconic examples from each lecture

Offered:
Fall only; annually

Faculty assigned:
Gwendolyn Wright (F/T)

I.4.2 Faculty Resumes

Name: John An, LEED AP

Courses Taught :
Roving Engineers Program

Educational Credentials:
B.Arch., Cornell University, 1997
M.Des., Harvard University, 2001
D.Des., Harvard University, 2004

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2011-2012

Professional Experience:
Consultant, Nam June Paik/Guggenheim Museum, 1997
Designer/Technician, Gruzen Samton Architects, 1997-1999
Assitant Architect, Shin Koga Architects, 1997-2000
Associate, Atelier Ten, 2005-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Smart Materials and Technologies in Architecture | ARCHITECTURAL PRESS, 2005
Evaluation of Assumptions in Building Energy Standards | HARVARD UNIVERSITY, 2004
A Guide to Designing Quality Lighting for Buildings and People | IESNA, 2008

Professional Memberships:
Illuminating Engineering Society of North America, Member

Name: Amale Andraos

Courses Taught:
A4005 Advanced Architecture Studio V
A4002 Core Architecture Studio II
A6454 Seminar – Eastern Hemisphere / Non Western

Educational Credentials:
B.Arch., McGill University, 1996
M.Arch., Harvard University, 1999

Teaching Experience:
Visiting Critic, American University of Beirut, 2003
Trott Professor of Architecture, Ohio State University, 2006
Adjunct Professor, Harvard University, 2005-2006
Herbert Baumer Distinguished Visiting Professor, Ohio State University, 2008
Visiting Lecturer, University of Pennsylvania, 2008
Visiting Professor, Columbia University, 2009
Adjunct Professor, Parsons the New School for Design, 2009
Distinguished Visiting Critic, New York Institute of Technology, 2011
Adjunct Professor, Princeton University, 2004-2011
Assistant Professor, Columbia University, 2011-Present

Professional Experience:
Junior Architect, Atelier Big City, Montreal, QC, 1996
Junior Architect, Saucier + Perrotte, Montreal, QC, 1997
Design Architect, Rem Koolhaas / OMA, Rotterdam, NL, 1999–2003
Principal, WORKac, New York, NY 2003–present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"49 Cities" in *Utopia Everywhere* (Berlin: Gestalten, 2011)
Above the Pavement, the Farm: Architecture and Agriculture at P.F.1 (NJ: Princeton Architectural Press, 2010)
"P.F.1" in *Design Ecologies*, (NJ: Princeton Architectural Press, 2009)
49 Cities (NY: Storefront for Art and Architecture, 2009)
"Dubai's Island Urbanism" in *Cities from Zero* (London: Architectural Associations Publications, 2007)
"Will the Real Dubai Please Stand Up in *Superlative City: Dubai and the Urban Condition in the Early Twenty-First Century* (Cambridge: Aga Khan Program of the Harvard Graduate School of Design, 2008)
"Cadavre Exquis Lebanese" in *Visionary Power: Producing the Contemporary City* (Rotterdam: NAi Publishers, 2007)
"A Program Primer" in *Praxis Journal 8: reProgramming* (NY: Praxis Inc., 2008)
"Why are we still learning from Las Vegas?" in *Bidoun, Issue 04, Dubai Issue* (NY: Bidoun, 2005)

Professional Memberships:
Architectural League of New York, Board Member

Name: Chris M. Andreacola, AIA, LEED AP

Courses Taught :
A4114 Architectural Technology IV
A4115 Architectural Technology V

Educational Credentials:
B.F.A., Rhode Island School of Design, 1980
B.Arch., Rhode Island School of Design, 1981

Teaching Experience:
Adjunct Assistant Professor of Architecture, Columbia University, 2004-Present

Professional Experience:
Loeffler Johansen Bennet Architects / John M. Johansen FAIA, 1985-1997
Senior Associate, Polshek Partnership Architects, 1998-2008
Senior Associate, Diller Scofidio + Renfro, 2008-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
The American Institute of Architects

Name: Phillip Anzalone, AIA

Courses Taught (Four semesters prior to current visit in Spring 2013):
A4001 Core Architecture Studio I
A4111 Architectural Technology I
A4115 Architectural Technology V

Educational Credentials:
B.P.S. Architecture, State University of Buffalo, 1994
M.Arch., Columbia University, 1997

Teaching Experience:
Visiting Assistant Professor, Pratt Institute Graduate School of Architecture, 2002-2008
Adjunct Assistant Professor of Architecture, Columbia University, 2005-Present
Director, Columbia Building Intelligence Project, Columbia University; 2009-2012

Professional Experience:
Architectural Designer / Intern, Greg Lynn Form, 1996 - 2001
Building Envelope Consultant, R.A. Heintges and Associates, 2001 – 2005
Principal, Atelier Architecture 64, 2006 – present

Licenses/Registration:
New York

Selected Publications and Recent Research:
“Detailing Articulation” in Matter: Material Processes in Architectural Production, G. Borden & M. Meredith (eds); 2011
“Digital Tea Houses” in Domus; October 2010
“Digital Tea Houses” in Shinkenchiku; October 2010

Professional Memberships:
The American Institute of Architects

Name: Benjamin Aranda

Courses Taught :
A4005 Advanced Architecture Studio V

Educational Credentials:
M.Arch, Columbia University, 1999

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2010-present

Professional Experience:
Founding Principal, Aranda/Lasch, 2003-present
Licenses/Registration:
N/A

Selected Publications and Recent Research:
Pamphlet Architecture 27: Tooling, 2005

Professional Memberships:
N/A

Name: Erieta Attali

Courses Taught:
A4676 Architectural Photography I
A4612 Architectural Photography II
A4615 Architectural Photography II

Educational Credentials:
B.A. (Photography), Athens Technical Institution (1992)
M.A. Image & Communication, Goldsmith's College, University of London, UK (1997-8)
Fulbright Artist & Visiting Scholar, GSAPP, Columbia University (2000)
Japan Foundation Artist Fellowship & Visiting Scholar, Waseda University, Tokyo (2002)

Teaching Experience:
Adjunct Assistant Professor of Architectural Photography, Columbia University, 2003-Present.

Professional Experience:
Architectural Photography Workshop:
Guest Professor - Pontificia Universidad Católica de Chile (2011, 2012)
Architectural Association, School of Architecture, London, UK (2011)
Guest Professor - Universidade Presviteriana Mackenzie, Sao Paulo, Brazil (2011)
Guest Professor - The Royal Danish Art Academy of Fine Arts, School of Architecture (2010)
Graham Foundation Grant, Chicago, for traveling exhibition "Reflected Transparency: Contemporary Architects Working in Glass" (2004)
Head Photographer - Institute for Aegean Prehistory, Crete Island (2001-2)
Archaeological Photographer - Greek Ministry of Culture (1992-7)

Licenses/Registration
N/A

Selected Publications and Recent Research:
Various magazine publications and museum exhibitions, such as *Casabella, 2G, Quaderns, Harvard Design Magazine* and *Bauwelt;* and *Sotheby's in New York, the Benaki Museum in Athens, the Royal Danish Academy in Copenhagen, the Royal Photographic Society in Bath,* and *the Museum of Finnish Architecture in Helsinki respectively.*
Erieta Attali: In Extremis: Landscape Into Architecture [Kenneth Frampton (Author), Juhani Pallasmaa (Author), Jilly Traganou (Author), Erieta Attali (Photographer), 2011]

Professional Memberships:
N/A

Name: Kutan Ayata

Courses Taught :
A4024 Architectural Drawing and Representation II

Educational Credentials:
BFA in Architecture, Massachusetts College of Art, 1999
M.Arch, Princeton University, 2004

Teaching Experience:
Adjunct Assistant Professor, Pratt Institue, 2007-present
Adjunct Assistant Professor, Columbia University, 2009-present

Professional Experience:
Project Architect, Reiser + Umemoto, 2005-2008
Founding Principal, Young&Ayata, 2008-present
Licenses/Registration:
Turkey

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Mark Bearak, AIA, LEED AP

Courses Taught:
A4656 Face Pace / Slow Space
A4747 Parametric Realizations

Educational Credentials:
B.S. of Arch., Georgia Tech, 2001
M. Arch., Columbia University, 2008

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2008-2012

Professional Experience:
Junior Designer, SOM, NY, NY 2008-2012
Architect, MESH, NY, NY 2012-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
N/A

Professional Memberships:
The American Institute of Architects

Name: Michael Bell

Courses Taught:
A4003 Core Architecture Studio III - Transit Based Housing
A4005 Advanced Architecture Studio V - Materials Based Design Studio
A4006 Advanced Architecture Studio VI - Materials Based Design Studio
A4678 Seminar- New Spaces of Housing: (Affordable and Public Housing)

Educational Credentials:
B.S., Arch. Catholic University of America, 1983
M.Arch., University of California at Berkeley, 1987

Teaching Experience:
Lecturer in Architecture, University of California at Berkeley, 1987-1993
Assistant Professor, Rice University, 1993-1997
Associate Professor with tenure, Rice University, 1997-1999
Associate Professor of Architecture, Columbia University, 1999-2003
Visiting Associate Professor, Harvard University, 2003
Eliel Saarinen Visiting Professor, Ann Arbor, University of Michigan, 2008
Associate Professor, with tenure, Columbia University, New York, 2004 - 2010
Visiting Fellow, Harvard University Joint Center for Housing Studios, 2011 - 2012
Professor of Architecture, Columbia University, 2004-Present
Director of Core Architecture Studios, Columbia University, 2004-Present

Professional Experience:
Design Architect, Stanley Staitowitz Office, San Francisco, CA, 1985-1986
Design Architect, David Holsher and Partners, Berkeley, CA, 1986-1987
Design Architect, Lars Lerup Architects, Berkeley, CA, 1987-1988
Principal, Michael Bell Design, 1990-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Foreclosed: Rehousing the American Dream, The Museum of Modern Art, New York, 2011-2012. Architectural and urban design for housing and the future of the American suburbs. Commissioned by MoMA.
Post Ductility: Metals in Architecture and Engineering. Edited by Michael Bell and Craig Buckley*, (Princeton Architectural Press, 2012).*
Solid States: Changing Time for Concrete, edited by Michael Bell and Craig Buckley*, (Princeton Architectural Press, 2010).*
Engineered Transparency: The Technical, Visual, and Spatial Effects of Glass; Michael Bell and Jeannie Kim, (Princeton Architectural Press, 2008.)

Professional Memberships:
N/A

Name: David Benjamin

Courses Taught:
A4004 Advanced Architecture Studio IV
A4005 Advanced Architecture Studio V
A4378 Living Architecture I
A4379 Living Architecture II
A6120 Architecture Biosynthesis

Educational Credentials:
B.A., Harvard University, 1996
M.Arch., Columbia University, 2005

Teaching Experience:
Assistant Professor, Columbia University, 2006-Present

Professional Experience:
Principal Designer, The Living, New York City, 2005-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"Optimization Beyond the Technical," in *Designing Design, Assembly, Industry: Digital Processes in Architecture*, edited by Scott Marble (Birkhauser, forthcoming 2012).
"Open," in *Matter: Material Processes in Architectural Production*, edited by Michael Meredith (Taylor & Francis, 2011).
"Testing Material Limits, Testing Material Territories," in *Post Ductility: Metals in Architecture and Engineering*, edited by Michael Bell (Princeton Architectural Press, 2011).
"Living City: A Public Air Quality Interface and a Platform for Buildings to Talk to One Another," in *Alphabet City: Air*, edited by John Knechtel (MIT Press, 2010): 176-185.
"Amphibious Envelopes," in *Sentient City: Ubiquitous Computing, Architecture, and the Future of Urban Space*, edited by Mark Shepard (Monacelli Press, 2010): 48-63.
"Multi-Objective Optimization in Architectural Design," co-written with Ian Keough, Winner of Best Paper Award at the Symposium for Simulation in Architecture and Urban Design (SimAUD) (April 2010).
"Flash Research," in *Young Architects 8: Instability* (Princeton Architectural Press, 2007): 20-45.

Professional Memberships:
The American Institute of Architects, Associate

Name: Ezio Blasetti

Courses Taught:
A4801 Encoded Matter, Workshop in Computational Craft
A4105 Advanced Design Studio V

Educational Credentials:
Dipl.Arch., National Technical University of Athens, 2004
M.S.A.A.D., Columbia University, 2006

Teaching Experience:
Adjunct Professor, Rensselaer Polytechnic Institute, New York, 2010-2011
Visiting Faculty, Southern California Institute of Architecture, Los Angeles, 2011
Visiting Assistant Professor, Pratt Institute, New York, 2007-present
Lecturer, University of Pennsylvania, 2012-present

Professional Experience:
Graduate Architect, Studio Daniel Libeskind, New York, 2006
Project Architect, Acconci Studio, New York, 2006-2008
Project Architect, Biothing, New York, 2006-2009
Project Architect, Serge Studio, New York, 2008-2010
Founding Partner, Ahylo Studio, Athens, Greece, 2009-present

Licenses/Registration:
Technical Chamber of Greece (TEE/TCG)

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Biayna Bogosian

Courses Taught:
A4792 Approaching Convergence

Educational Credentials:
B.Arch., Woodbury University, 2008
M.S.A.A.D., Columbia University, 2010

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2011-Present
Adjunct Assistant Professor, University of Southern California, Los Angeles, 2012

Professional Experience:
Project Architect, Mike Jacobs Architecture, New York, 2006-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Leach, Neil and Philip Yuan (Ed.) 'Approaching Convergence.' Scripting the Future. Tongji University Press: Shanghai, June 2012.

Leach, Neil and Xu Weiguo (Ed.) Machinic Processes: Architecture Biennial Beijing 2010. Page 94-96.

Bogosian, Biayna and Vianayak Bharne. 'Excavating Yazd.' The Emerging Asian City: Traditions, Tensions and Transformations. Vinayak Bharne. Anticipated Publish Date, December 2011.

Bogosian, Biayna and Vianayak Bharne. 'In Praise of Qanats: Towards an Infrastructural Urbanism in Yazd.' 2010 ACSA Conference Proceedings. Page 330-341.

Bogosian, Biayna, Maider Llaguno, Maurizio Bianchi. 'Oculli.' P-public. KAM: Athens, Greece, April 2010.

Professional Memberships:
The American Institute of Architects

Name: Brigette Borders

Courses Taught:
A4747 Parametric Realizations
A4656 Fast Pace / Slow Space

Educational Credentials:
B.A., Wellesley College, 2004
M.Arch., Columbia University, 2009

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2009-present

Professional Experience:
Intern, Tigerman McCurry Architects, Chicago, IL 2004-2005
Intern, Situ Studio, Brooklyn, NY, 2008
Freelance Designer, aa64, Brooklyn, NY 2011
Manager, Laboratory for Applied Building Science, GSAPP, 2009-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Curved Die, Creased Structure, research given an honorable mention in Tex-Fab competition. (Borders, Brigette; Fabrikant, Justin) 2012
“Life After Death,” The New City Reader 1 (16): 2. (Borders, Brigette) 2010.
“Digital Tea House,” Domus (938): 8-9. (Anzalone, Phillip; Borders, Brigette; Ko, Kaon; Liotta, Salvator-John.) 2011.
“Topics in Stroke Rehabilitation” 14 (1): 72-84. (Borders, Brigette; Levin, Tal; Scott, Billie M.;Hart, Katie; Lee, Jasmine; Decanini, Anthony.) 2007.

Professional Memberships:
N/A

Name: Timothy Boyle

Courses Taught:
A4022 Fundamentals of Urban Digital Design

Educational Credentials:
B.S. Design, Arizona State University, 2002
M.Arch, Columbia University, 2005

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2005-Present

Professional Experience:
Co-Founder and Design Principal, brina dada Toys, New York 2009-2011
Project Architect, Sawyer/Berson New York 2002-Present
Design Principal, Tim Boyle Design, LLC New York 2005-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Lynne Breslin, AIA

Courses Taught:
A4460 Japanese Urbanism
A4005 Advanced Architecture Studio V

Educational Credentials:
A.B, Harvard University, 1974
M.Arch., Princeton Univeristy, 1978
M.A., Princeton University, 1982

Teaching Experience:
Parsons School of Design, 1981 – 1984
Institute for Architecture & Urban Studies, Lecturer, 1981 – 1984
Cooper Union, Visiting Assistant Professor, 1985 – 1986
Pratt Institute, Visiting Assistant Professor, 1984 – 1990
Princeton University, Visiting Lecturer, 1987 – 1990
Columbia University, Adjunct Associate Professor, 1986-Present

Professional Experience:
Arata Isozaki Atelier, 1978 – 1979
Mitchell Giurgola Architects, 1980
Lynne Breslin Architects, 1981-Present

Licenses/Registration:
New York
New Jersey

Selected Publications and Recent Research:
New York Times, *A View Inside King Kongs Perch7/2011*
Slavery and Civil War 10/2006
Giving Owners Access to Nature 11/2004
House Proud: Blind Faith 10/2004
Wall Street Journal: *Prospect Heights Edges into Crown Height, 2/2011*
A Westchester House with Deep Views, 5/2010
Contemporary Houses: *Dean House,* 2006,
Sex & Architecture: *Confessions in a Public Space* 1996
Any Architectural Journal: *Ando* 1994

Professional Memberships:
The American Institute of Architects

Name: Brian W. Brush

Courses Taught:
A4741 Field of Play
A4005 Advanced Architecture Studio V
A6853 Advanced Architecture Studio
A4535 Digital Craft
A4763 Design and Development Studio

Educational Credentials:
B.A., Montana State University, 2005 *(Summa Cum Laude)*
M.Arch, Columbia University, 2010
M.S.U.D, Columbia University, 2010
Ph.D., Architecture, University of Oregon, 2012-Present

Teaching Experience:
Adjunct Assistant Professor of Architecture, Columbia University, 2010-Present
Visiting Faculty Member, Montana State University, 2011-Present
Graduate Teaching Fellow, University of Oregon, 2012-Present

Professional Experience:
Research Associate, Sonoran Institute/Montana State University Community Design Center, Bozeman MT, 2005-2007
Architectural Designer, Ralph Johnson Architect, Bozeman MT, 2005-2006
Research Assistant, Columbia University Spatial Information Design Lab, 2008-2010
Partner, E/B Office New York NY Portland OR 2008-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"Filament Mind" Permanent Installation, Teton County Library Jackson WY 2012-2013 (in progress)
"SEAT" Public Pavilion, Freedom Park Atlanta GA, 2012
"Dynamic Performance of Nature" Permanent Installation, The Leonardo Museum Salt Lake City UT, 2010-2011
"Beyond the Reference: Continuity, Memory and Territory in Cartographic Art." *Seismopolite: Journal of Art and Politics.* Issue 3, 2012.
"Dynamic Performance of Nature: Augmenting environmental perception through social media and architectural informatics." *Parsons Journal of Information Mapping* Vol 4 (1), 2012.

Professional Memberships:
N/A

Name: Babak Bryan, AIA, LEED AP, NCARB

Courses Taught:
ARCH A4024 Architectural Drawing and Representation II
ARCH A4000 Design Studio (NY-P Program)
ARCH A1003 Introduction to Architecture

Educational Credentials:
B.S., UC Berkeley, 1998
M.Arch., Columbia University, 2004

Teaching Experience:
Lecturer, University of Pennsylvania, 2006
Adjunct Assistant Professor, Columbia University, 2004-Present
Adjunct Associate Professor, City University of New York, CCNY, 2011-Present

Professional Experience:
Project Manager, Ben Hansen Architect, 2005-2006
Associate, TEK Architects, 2007-2011
Partner, BanG studio LLC, 2011-Present

Licenses/Registration:
New York
NCARB Certificate

Selected Publications and Recent Research:
“P is for Printer” , *INK,* Columbia University Press (forthcoming)
“The Sheltering Sky: Sukkah Stories,” Damn Magazine, no. 26 Oct./Nov./Dec. 2010
“Urban Island: or How I Learned to Stop Worrying and Love Flatbush Ave,”
Reinventing Grand Army Plaza, Megan Canning ed., Design Trust for Public Space

Professional Memberships:
The American Institute of Architects

Name: Craig Buckley

Courses Taught:
A4488 Arguments
A4566 Collecting Architecture Territories
A4577 Architects' Manifestos In The 20th Century
A4566 Architecture, Print, Politics: Case Studies 1945 to 1975

Educational Credentials:
B.A., Trent University, 1999
M.A. University of Western Ontario, 2001
Ph.D. Candidate, Princeton University 2004-Present

Teaching Experience:
Teaching Assistant, Princeton University, 2005-05
Adjunct Assistant Professor, Columbia University, 2010-Present

Professional Experience:
N/A

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"Never Demolish: Bois-le-Prêtre Regrows in Paris," *Log* 24 (Spring 2012).
Post-Ductility: Metals in Architecture and Engineering, Princeton Architectural Press (Spring 2012) (coedited with Michael Bell)
Dan Graham's New Jersey, Lars Müller, (Fall 2011) (coedited with Mark Wasiuta)
"Landscapes without Cultural Precedent: Tony Smith's Urban Visions" *Perspecta* 44 (Fall 2011) 70-85
Utopie: Image, Text, Project 1967-1978, Semiotext(e)/MIT press, (coedited with Jean-Louis Violeau, Spring 2011)
"Graphic Constructions: The Experimental Typography of Edward Wright," *October* 136 (Spring 2011) 156-181.
Clip/Stamp/Fold: The Radical Architecture of Little Magazines, ACTAR (coedited with Beatriz Colomina, Fall 2010)
Solid States: Concrete in Transition, Princeton Architectural Press, (coedited with Michael Bell, 2010)
"Caracas: The Informal City," (review) *Journal of the Association of Architectural Historians* 68:3 (September 2009) 433-45.

Professional Memberships:
Society of Architectural Historians
College Art Association

Name: Eric Bunge, AIA

Courses Taught:
A4006 Advanced Architecture Studio VI: Rio Super Hospital
A4006 Advanced Architecture Studio VI: Parallel MoMA

Educational Credentials:
B.Arch., McGill University, 1991
M.Arch., Harvard University, 1996

Teaching Experience:
Adjunct Assistant Professor, Rhode Island School of Design, 2000-2001
Assistant Professor, Barnard & Columbia Colleges, 2001-2003
Adjunct Assistant Professor, Parsons School of Design, 2003-2007
Visiting Professor, University of Toronto, 2006
Visiting Professor, Harvard Graduate School of Design, 2008
Visiting Critic, Yale University, 2009
Adjunct Assistant Professor, Columbia University, 2008-Present

Professional Experience:
Designer, Paul Andreu/Aeroports de Paris/ADP, 1993-4
Project Architect, Kennedy & Violich Architecture, 1996-1999
Project Architect, Diller + Scofidio, 1999
Founding Principal, nARCHITECTS PLLC, 1999-Present

Licenses/Registration:
New York

Selected Publications and Recent Research:
nARCHITECTS - Eric Bunge & Mimi Hoang (2000-2008), (Design Documents, Damdi, 2008).
Provisional: Emerging Modes of Architectural Practice, (Princeton Architectural Press, 2011)

Professional Memberships:
The American Institute of Architects

Name: Nathaniel Carter

Courses Taught:
A4798 Craft in the Digital Age

Educational Credentials:
B.E.D., Texas A&M University, 2005
M.Arch., Columbia University GSAPP, 2008

Teaching Experience:
Woodshop Teaching Assistant, Columbia University, 2007-2008
Assistant Adjunct Professor, Columbia University, 2011-Present

Professional Experience:
Woodshop Manager/Building Manager, Columbia University, 2008-2011
Lab for Applied Building Science Manager, Columbia University, 2011-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Christy Cheng, AIA

Courses Taught:
A4006 Advanced Architecture Studio VI

Educational Credentials:
B.A., University of Pennsylvania, 2002
M.Arch., Harvard University Graduate School of Design, 2007

Teaching Experience:
Teaching Assistant, Harvard University Graduate School of Design, 2006-2007
Visiting Faculty, Cornell University Architecture/Art/Planning, 2008-2009, 2012
Teaching Associate, Harvard University Graduate School of Design, 2009
Guest Critic, Harvard University Graduate School of Design, 2012
Adjunct Assistant Professor, Columbia University, 2011 – 2012
Adjunct Associate Professor, City College Spitzer School of Architecture, 2012

Professional Experience:
Project Architect, Fake Design, Beijing, China, 2004
Intern, Marmol Radziner and Associates, Los Angeles, CA, 2005
Intern, Michael Maltzan Architecture, Los Angeles, CA, 2005
Intern, Cannon Design, Boston, MA, 2006
Architect, Office for Metropolitan Architecture, New York, NY, 2007-2010
Project Architect, Toshiko Mori Architect, New York, NY 2010-2012

Licenses/Registration:
New York

Selected Publications and Recent Research:
A+U Special Issue: Venturi and Scott Brown (Editor), June 2009

Professional Memberships:
The American Institute of Architects

Name: Kevin Cimini

Courses Taught:
A4542 Imagining the Unreal
A4534 Techniques of the Ultrareal

Educational Credentials:
B.Arch., University of California at Berkeley, 1997
M.Arch., Columbia University, 2004

Teaching Experience:
Teaching Assistant, Columbia University, 2002-2004
Adjunct Professor of Architecture, Pratt Institute, 2005-2006
Guest Lecturer, University of Toronto, 2010
Adjunct Professor of Architecture, Columbia University, 2009-Present

Professional Experience:
Jr. Architect, Allied Architecture + Design, San Francisco 1997
Jr. Architect, Fisher Friedman Associates, San Francisco 1998-2001
Designer / 3D Artist, Rafael Vinoly Architects, NY 2002
Designer / 3D Artist, Marble Fairbanks, NY 2003
Production Designer, KDLAB, NY 2004-2005
Designer / Principal, Cimini Design, NY 2005-2006
Designer / Principal, March, NY 2007-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:

Provisional - Emerging Modes of Architectural Practice USA | Princeton Architectural Press (2010)
nPower Software | Featured Artist | Interview (2009)
www.npowersoftware.com/Artist_of_The_Month_Kevin_Cimini.html
GA Houses - Project 2008 | A.D.A. Edita Tokyo
Disorder in Progress | Die Gestalten Verlag GmbH & Co. KG, Berlin (2006)
American Cinematographer | The Virtual World of Mezzo | by Douglas Bankton (2006)

Professional Memberships:
N/A

Name: Mark Collins

Courses Taught:
A4006 Advanced Architecture Studio VI
A4707 Digital Detailing
A4711 Search: Advanced Algorithmic Design
A4793 App-itecture

Educational Credentials:
B.S., Georgia Institute of Technology, 2001
M.Arch, Columbia University, 2006

Teaching Experience:
Adjunct Professor, New York University Interactive Telecommunications Program 2008-2010
Visiting Professor, Washington University in St Louis Sam Fox School of Design, 2010
Adjunct Assistant Professor, Columbia University 2006-Present
Visiting Professor, The City College of New York 2011-Present

Professional Experience:
Intern, David Brody Bond Architects, New York, NY 1988-1991
Intern, Stang & Newdow Architects, Atlanta GA 2001-2002
Intern, Brock Green Architects and Planners, Atlanta GA 2002-2003
Principal, Proxy Design Studio LLC New York, NY 2003-Present
Partner, Morpholio LLC, New York NY 2011-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
ALGODE 2011 Algorithmic Design for Architecture Conference, “Human Computer Interaction in Architecture: Exploring the Brain-Body-Environment Continuum”
Volume: Internet of Things. Archis 2011 #2. “Smart Environments” and “The Importance of Random Learning”
Machinic Processes: Architecture Biennial Beijing 2010 “Computing Kaizen”
Cloud Computing and Architecture Symposium, Osaka Sangyo University with Takashi Yamaguchi
Processing.org Digital Exhibitions, “Computing Kaizen”
Scripting Cultures “Architectural Design and Programming”
Informal Toolbox (Co-editor and author), Author and Designer. ISBN 9780982078303
ACADIA 2006 “Synthetic Landscapes” - The hexEnvelope system: a cross-platform embedding of material and software logic into descriptive geometry

Professional Memberships:
N/A

Name: Robert S. Condon, AIA

Courses Taught:
A4114 Architectural Technology IV
A4115 Architectural Technology V

Educational Credentials:
B.Arch., Carnegie-Mellon University, 1984

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 1996-Present

Professional Experience:
Architect- Edward Larabee Barnes 1983-1986
Associate Polshek Partnership 1996-2003
Associate Partner- Diller Scofidio + Renfro 2004-2009
Owner - Robert S. Condon Architect P.C. 1986-1988 & 2009-2012

Licenses/Registration:
New York

Selected Publications and Recent Research:
N/A

Professional Memberships:
The American Institute of Architects

Name: Lise Anne Couture, AIA

Courses Taught :
A4537 Outside the Box – Seminar
A4005 Advanced Architecture Studio V

Educational Credentials:
B.Arch., Carleton University, 1983
M.Arch., Yale University, 1986

Teaching Experience:
Assistant Professor, University of Michigan, 1988-89
Visiting Critic, Harvard University, 1991
Visiting Professor, Stadelschule, Frankfurt, Germany, 1992
Visiting Professor, Berlage Institute, Amsterdam, The Netherlands, 1992
Adjunct Assistant Professor, Barnard College, 1990-92
Visiting Professor, University of Montreal, 1993
Design Faculty, Parsons School of Design, 1990-99
Visiting Professor, Princeton University, 2001
Bishop Visiting Professor, Yale University, 2002
Shure Visiting Professor, University of Virginia, 2004
Visiting Professor, Massachusetts Intitute of Technology, 2006
Kenzo Tange Distinguished Visiting Professor, Harvard University, 2008
Davenport Visiting Professor, Yale University, 2004, 2009
Baird Visiting Professor, Cornell University, 2010-2011
Visiting Professor, Southern California Institute of Architecture, 2005, 2011
Associate Professor of Architecture, Columbia University, 1997-Present

Professional Experience:
Principal, Asymptote Architecture, 1989-Present

Licenses/Registration:
New York

Selected Publications and Recent Research:
"Asymptote Architecture: Actualizations", Rashid, Hani, and Couture, Lise-Anne, AADCU, 2010
"Design Document Series 09: Scape, Asymptote Architecture/USA", Rashid, Hani, and Couture, Lise-Anne, DAMDI Co., Ltd , 2004
"FLUX", Rashid, Hani, and Couture, Lise-Anne, Phaidon, 2002
"Asymptote: Rashid + Couture, A+U", Rashid, Hani, and Couture, Lise-Anne, A+U Publishing Co., LTD, 1999
"Architecture at the Interval", Rashid, Hani, and Couture, Lise-Anne, Asymptote, Rizzoli International, 1996

Professional Memberships:
The American Institute of Architects

Name: J. Yolande Daniels

Courses Taught:
A4002 Core Architecture Studio II
A4526 Crisis Architecture

Educational Credentials:
B.S.A., City College, City University of New York, 1987
M.Arch., Columbia University, 1990

Teaching Experience:
Adjunct Assistant Professor of Architecture, City College, City University of New York, 1992-1995
Adjunct Assistant Professor, Columbia University, 1997
Adjunct Assistant Professor of Architecture, Pratt Institute, 1997-1998
Assistant Professor of Architecture, University of Michigan, 1998-2000
Assistant Professor of Architecture, Columbia University, 2000-2011

Professional Experience:
Office of Thierry Despont, New York, 1990-1991
Gaetano Pesce Ltd., New York, 1991
Project Manager, Smith-Miller + Hawkinson Architects, New York, 1991-1993
Project Designer, Selldorf Architects, New York, 1993-1995
Project Designer, Ralph Appelbaum Associates, New York, 1996-1998
Partner, SUMO, New York, 1995-Present

Licenses/Registration:
??

Selected Publications and Recent Research:
Has published in journals including: *Journal of Architecture, Architecture, Architectural Record, Global Architecture, Frame, Azure, Wallpaper*; and in anthologies including: Harlemworld: Metropolis as Metaphor, White Papers, Black Marks: Architecture Race Culture and Crime and Ornament: the Arts and Popular Culture in the Shadow of Adolf Loos

Professional Memberships:
Journal of Architectural Education, Editorial Board

Name: Thomas de Monchaux

Courses Taught :
A4003 Core Architecture Studio III
A4006 Advanced Architecture Studio VI

Educational Credentials:
B.A., Architectural Studies/Art History, Brown University, 1996
B.A., History, Brown University, 1996
M.Arch, Princeton University, 2001

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2010-present

Professional Experience:
Designer, Michael Hopkins & Partners
Designer, Diller, Scofidio + Renfro
Designer, Lot-EK
Licenses/Registration:
N/A

Selected Publications and Recent Research:
Groundwork : Between Landscape and Architecture, Diana Balmori and Joel Sanders (2011)

Professional Memberships:
N/A

Name: Hernan Diaz Alonso

Courses Taught:
A4006 Advanced Architecture Studio VI

Educational Credentials:
Architect, Universidad Nacional de Rosario, Argentina, 1994
M.S.A.A.D., Columbia University, 1999

Teaching Experience:
Visiting Professor, Art Center College of Design, Pasadena, 2006
Louis I. Kahn Visiting Assistant Professorship of Architectural Design, Yale University, 2010
Adjunct Associate Professor of Architecture, Columbia University, 2004-2011
Thesis Coordinator, Southern California Institute of Architecture, 2005-2011
Graduate Program Chair, Southern California Institute of Architecture, 2011-Present

Professional Experience:
N/A

Licenses/Registration:
Argentina

Selected Publications and Recent Research:
Has published in Architectural Record, A+U, Icon, Metropolis, and New York Times, LAtimes, Blobjects and beyond, by Chronicle Books, The Next Generation Book, and many other journals worldwide.
Xefirotarch, Monograph, 2007
Design Series 4, Xefirotarch, SFMOMA Press
Session, Editor, SCIARC Press

Professional Memberships:
Colegio de Arquitectos de Rosario, Argentina, Associate Member

Name: Markus Dochantschi, AIA

Courses Taught:
A4005 Advanced Architecture Studio V – Documentation Center Cambodia
A4005 Advanced Architecture Studio V – Educational Campus, DRC
A4005 Advanced Architecture Studio V – Educational Hubs in Accra, Ghana
A6911 Urban Planning Studio – The Golden Horn Estuary, Istanbul
A4005 Advanced Architecture Studio V– The Golden Horn Estuary, Istanbul
A4006 Advanced Architecture Studio VI – Architecture/Propaganda, Moscow

Educational Credentials:
M.Arch., Darmstadt, Germany, 1995

Teaching Experience:
Assistant Professor to Zaha Hadid, Hochschule für bildende, Künste Hamburg, Germany, 1998.
Guest Professor, Fachhochschule Detmold, Germany in 1999.
Assistant Professor to Zaha Hadid, Yale University School of Architecture, 2002/2004.
Assistant Professor to Stefan Behnisch and Gerald Hines, Hadid, Yale University School of Architecture, 2006.
Adjunct Professor Urban Planning at Columbia University, 2011.
Adjunct Professor at Columbia University, Advanced Design Studio 2008-present.
Director of the Global Metropolis Masters program at Columbia University, 2012-present.

Professional Experience:
Director, Zaha Hadid Architects, 1995-2002
Principal and Founder, studioMDA 2002-present

Licenses/Registration:
ARB, United Kingdom
AKH, Germany

Selected Publications and Recent Research:
London Lofts
Bauwelt, Berlin, Germany,1997
LF one, Landscape Formation One in Weil am Rhein Germany
Birkhäuser Publishers, 2000
Architecture of Zaha Hadid in Photographs, Lars Müller Publishers (Helene Binet, 2001)
The Rosenthal Center for Contemporary Art, Lars Müller Publishers, 200
Poetry, Property and Place, Stefan Behnisch and Gerald Hines, Yale School of Architecture, 2006

Professional Memberships:
The American Institute of Architects

Name: Andrew Dolkart

Courses Taught:
A6705 Architecture+Development of NY.
A4341 American Architecture I

Educational Credentials:
BA, Colgate University, 1973.
MS in Historic Preservation, Columbia University, 1977.

Teaching Experience:
Assistant Professor, Columbia University, 200-Present

Professional Experience:
N/A

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Morningside Heights: A History of Its Architecture and Development (Columbia University Press, 1998).
The Row House Reborn: Architecture and Neighborhoods in New York City 1908-1929 (Johns Hopkins University Press, 2009)

Professional Memberships:
N/A

Name: Zachary Downey, RA LEED AP BD+C

Courses Taught:
A4720 Meshing

Educational Credentials:
B.Arch., Virginia Tech, 2005

Teaching Experience:
Workshop Instructor, Virginia Tech 2005-2009
Workshop Instructor, University of Arizona, 2010
Adjunct Professor, Columbia University, 2011-present

Professional Experience:
Project Manager and Designer, SMBW Architects, Richmond VA 2005-2007
Technology Director / Design Associate, SHoP Architects, NYC 2007-2011
Partner, Parabox, Brooklyn NY, 2011-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
Yale Constructs, Spring 2010
A+U Special Issue, August 09: Architectural Transformations va BIM

Professional Memberships:
NCARB Registered Architect
USGBC LEED Accredited Professional, BD+C

Name: Joshua Draper

Courses Taught:
A4748 Special Topics in Fabrication: Formworks
A4753 Life
A4757 Support

Educational Credentials:
B.A., St. John's College, 1992
M.Arch., Columbia University, 2008

Teaching Experience:
Adjunct Assistant Professor, Rensaleer Polytechnic Institute, 2008
Adjunct Assistant Professor, Barnard College, 2012
Adjunct Assistant Professor, Columbia University, 2008-Present

Professional Experience:
Studio Daniel Libeskind, New York, NY, 2004-6
Project Manager and Lead Designer, S3 Architects, New York, NY, 2011 Architect, Founder and Principal, PrePost, Brooklyn, NY, 2009-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"Groups and Spaces: Mapping Collaborative Cultural Production and Social Art Practices", Christopher Kennedy, 2010 (pp. 14-15 "Unreference Desk" design and production with Christopher Kennedy and Janette Kim)

ACSA WEST Fall | Material Matters: Making Architecture, "Digital Fabrication: Craft" 2008 Co-authored with Phillip Anzalone and Joseph Vidich

ACSA WEST Fall | Architecture in the Age of Digital Reproduction, "Reproducing Craft" 200, 8 Co-authored with Phillip Anzalone and Joseph Vidich

ACSA WEST Fall | New Directions in Prefabricated Architecture "Non-Uniform Assemblage" 2008, Co-authored with Phillip Anzalone and Joseph Vidich

"Spectrums of Control: From Traditional Craft to Robotic Construction in Japan", Kinney Traveling Award, 2008

Professional Memberships:
N/A

Name: Charles Eldred

Courses Taught:
A4003 Core Architecture Studio III

Educational Credentials:
B.Arch., Cornell University, 1986
M.Arch., University of California, Berkeley, 1987

Teaching Experience:
Adjunct Assistant Professor of Architecture, Columbia University, 2000-2005; 2008-present

Professional Experience:
Designer, Karahan/Schwarting Architecture Co., New York, 1987-1988
Associate/Project Architect, Fox & Fowle (FXFowle) Architects, New York, 1988-1991; 1992-2000
Principal, Charles Eldred Architect PLLC, New York, 2001- present

Licenses/Registration:
New York

Selected Publications and Recent Research:
“Run Like Hell”, in 32: New York/Beijing, issue #2, 2003.

Professional Memberships:
N/A

Name: Hilary Sample, AIA

Courses Taught
ARC 4003 Design Studio Core III – Housing (2012)
ARC 4003 Design Studio Core III – Housing (2011)

Educational Credentials:
B.Arch., Syracuse University, 1994
M.Arch., Princeton University, 2003

Teaching Experience:
Adjunct Assistant Professor, University of Toronto, 2003-2004
Coordinator Global Program Netherlands, University of Toronto, Summer 2004
Adjunct Professor, Northeastern University, Summer 2004
Reyner Banham Teaching Fellow, State University of New York Buffalo, 2004-2005
Assistant Professor, Yale University, 2005-2010
Associate Professor, Yale University, 2010-2011
Associate Professor, GSAPP, Columbia University 2011-present

Professional Experience:
Project Design, Wallace & Watson, Allentown, PA, 06/1994-05/1996
Project Designer, Richard Cook & Associates, 05/1996-02/1997
Senior Designer, Skidmore, Owning, and Merrill, LLP, New York City, 02/1997-08/ 1999Project Architect, Rem Koolhaas/OMA, Netherlands, 01/2000-11/2001
Architect, Principal, MOS Architects PLLC, New York City, 2007-present

Licenses/Registration:
New York
Connecticut

Selected Publications and Recent Research:
The Work of MOS, Software, Videos and Architecture, Princeton Architectural Press, 2012 (forthcoming in October)
Imperfect Health The Medicalization of Architecture, "Emergency Urbanism and Preventative Architecture,"Eds. Mirko Zardini and Giovanna Borasi, (Lars Müller. 2012)
Building Systems, Design, Technology, and Society, "A House within a House,", Eds. Kiel Moe and Ryan Smith, (Routlegde Press, 2012)

Professional Memberships:
The American Institute of Architects
Board Member, MacDowell Colony
Board Member, Dean's Advisory Panel, Syracuse University School of Architecture

Name: David Fano

Courses Taught:
A4023 Architecture Drawing & Representation I
A4535 Fundamentals of Digital Design
A4715 Re-Thinking BIM
A4720 Meshing

Educational Credentials:
M.Arch., Columbia University, 2006
B.A. Architecture, Florida International University, 2003

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2006-Present

Professional Experience:
Director of Technology Research, SHoP Architects, 2006-2008
Creator and Content Manager, DesignReForm.net, 2007-Present
Partner, CASE, 2008-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Michelle Fornabai

Courses Taught:
A4004 Advanced Architecture Studio IV

Educational Credentials:
B.A., Cornell University, 1989
M.Arch., Princeton University, 1992

Teaching Experience:
Design Studio Critic, Princeton University, 1991
Visiting Assistant Professor, Tulane University, 1994-1997
Adjunct Professor, Department of Interior Design, Woodbury Univerisity, 1998-1999
Lecturer, University of California at Los Angeles, 1998-2000
Visiting Distinguished Critic in Architecture, Boston Architectural Center, 2003
Adjunct Professor of Architecture, Adjunct Professor of Digital Media, Rhode Island School of Design, 1999-2006
Assistant Professor of Architecture, Columbia University, 2004-2011

Professional Experience:
Motion Control film F.X Designer/Fabricator, Gene Young Effects, Los Angeles, 1998
Set Designer, Foolish Productions, Los Angeles, 1998
Principal, Studio Matrixx, Boston/New Orleans, 1999-2001
Principal, ambo.infra Design, Boston, 2001-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Pattern Language: Clothing as Communicator, Tufts University.
Has published in *Praxis, Space, Architecture* and other journals.

Professional Memberships:
National Education Association Rhode Island
Fashion Institute of Technology, Design Member
Dance Notation Bureau New York

Name: Kenneth Frampton, Ware Professor of Architecture

Courses Taught:
A4229 Studies in Tectonic Culture
A4349 History of Architecure II
A4616 World Architecture and Critical Regionalism

Educational Credentials:
Dipl. Arch., Dipl. Trop., Architectural Association (London), 1956
A.R.I.B.A., Architectural Association (London), 1957

Teaching Experience (selected):
Visiting Professor, Università della Svizzera italiana, Accademia di architectettura, Mendrisio, Switzerland,1998-2003
Director, Ph.D. Program in Architecture (History and Theory), Columbia University, New York, 1993-2006
Visiting Professor at City College, 2007
Plym Distinguished Visiting Professorship, University of Illinois at Urbana-Champaign School of Architecture, 2009
Ware Professor of Architecture, Columbia University, New York, 1974-present

Professional Experience (selected projects):
House in Narrowsburg, Pennsylvania with Silvia Kolbowski, Henry Smith-Miller and Laurie Hawkinson,1995
Missisauga City Hall, Canada; (competition entry design in collaboration with Michael Fieldman and Brigit de Kosmi (unpremiated)).1983.
Marcus Garvey Park Village Housing, Brownsville, NYC; in collaboration with Arthur Baker, Anthony Pangaro, and Michael Kirkland (realized). 1973-1974

Licenses/Registration:
N/A

Selected Publications and Recent Research (selected):
Studies in Tectonic Culture, Cambridge, MA: MIT Press, 1995
World Architecture: A Critical Mosaic 1900-2000 Vols: 1-10, General Editor, Beijing: China Building Press, 2000
Le Corbusier, London: Thames & Hudson, 2002
Labor, Work & Architecture, London: Phaidon , 2002
Le Corbusier Architect of the Twentieth Century, New York: Abrams, 2002
Modern Architecture: A Critical History (4th Edition), London: Thames & Hudson, 2007
American Masterworks (2nd Edition), New York: Rizzoli, 2008
Five North American Architects, Lars Müller Publishers*, 2011*

Professional Memberships (selected):
Steering Committee Member, Aga Khan Award for Architecture, 2000
Board Member, Architectural League, New York, 1993-2008
Nominator for Inamori Foundation's Kyoto Prize, 2000-2010
Fellow of the American Academy Arts and Sciences, 2000-2010
Member of the Advisory Committee for the BSI Architecture Award, Archivio del Moderno, Mendrisio, 2008-2010
Member of the Class of the Arts of the Royal Flemish Academy of Belgium for Science and the Arts (2010-2011)

Name: Sean A. Gallagher

Courses Taught:
A4776 Man, Machine, and the Industrial Landscape

Educational Credentials:
B.A, University of North Carolina at Charlotte, 1999
B.Arch., University of North Carolina at Charlotte, 2000
M.S.A.A.D, Columbia University, 2005

Teaching Experience:
Visiting Critic, University of North Carolina at Charlotte, 2001-2003
Adjunct Assistant Professor of Architecture, Columbia University, 2006-Present

Professional Experience:
Intern, Custom Renovation Construction, Lafayette, NJ, 1996
Intern, NJ DEP State Architect Office, Trenton, NJ, 1997
Intern, Robert Zaccone and Associates, Old Tappan, NJ, 1998
Project Designer, Little Diversified Architecture, Charlotte, NC, 1999
Project Architect, Jenkins Peer Architects, Charlotte, NC, 2000-2004
Senior Associate, Smith-Miller + Hawkinson Architects, New York, NY, 2005-2010
Senior Architect, Diller Scofidio + Renfro, New York, NY, 2011-Current

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Resurfacing Place: Investigating Isolation and Refuge (ENYA Exhibition, NY 2006)
Translations of Societal Anxieties (University of North Carolina COAA, 2008) *Synergy in Architecture: Near Futures and the Machine* (AIA Center for Architecture, NY 2009)
Structural Expressions in Architecture (Pratt Institute School of Architecture, 2010)
Aesthetics of Crossing: Land Ports of Entry / Citizenship by Design (Van Alen Institute, NY 2010)

Professional Memberships:
N/A

Name: Douglas Gauthier, AIA

Courses Taught:
A4003 Core Architecture Studio III
A6012 Global Metropolis
A4763 Envisioning Studio
A6241 Compromised Public Space

Educational Credentials:
B.Arch., University of Notre Dame, 1985
M.S.A.A.D., Columbia University, 1992

Teaching Experience:
Studio Critic, Yale School of Architecture, 1999
Studio and Thesis Critic, Princeton University, 2003
Emerging Architect Visiting Critic, Barnard and Columbia College, 2003
Adjunct Professor, Parsons: The New School of Design, 2006-2009
Associate Professor, New Jersey Institute of Technology, 2008-2010
Ivan Smith Eminent Visiting Professor / Global Lab, University of Florida G|SoA, 2010
Adjunct Associate Professor of Architecture & Real Estate, GSAPP 1998-present

Professional Experience:
Project Architect/Designer, Holt Hinshaw Jones: Architecture, San Francisco, 1988-1994
Project Architect, Bernard Tschumi Architects, New York, 1992-1993
Competition Collaboration with Frank Barkow & Regine Leibinger, Berlin, 1994-1997
Founding Partner, System Architects, New York, 1998-2007
Design Director, GA / Gauthier Architects, New York, 2007-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
"Ford Foundation Revisited." *Twelve Institutional and Public Buildings Revisited 1928-1968.* (Max Risselada, Ed. Rotterdam: NAi Press. *Forthcoming*)
"Minute X Minute City," HUNCH 15, Solomon Frausto, (Ed. 2012: forthcoming)
"Housing: A Conversation Chakrabarti, Gauthier & Pasquarelli." *American City X: After the Master Plan.* (Philip Nobel. Syracuse: SANBS. 2012)
"Pits and Piles in the Non-Concept City: Luzerne Valley." *Formerly Urban: Projecting Rustbelt Futures.* (Edward Mitchell. Syracuse: SANBS, 2012)
"Legibility." another pamphlet 01. (I. King, R. Neihauser, G. Valle, Eds. 2011)
"168T and Folly:C" (Dunbar, Wells. *Design Bureau Magazine* Sept./Oct. 2011)
"Active Forms." *Material Evidence.* (M. Burgermeister, Ed. Trenton: AIA NJ Press, 2010)
*"BURST*008." "Closing the Gap," AD v.79.* (Richard Garber, Ed. John Wiley, 2009)
*"BURST*008."* *Home Delivery: Fabricating the Modern Dwelling.* (B. Bergdoll & P. Christensen, Eds. "New York: The Museum of Modern Art, 2008)

Professional Memberships:
The American Institute of Architects; The Architectural League of New York; Van Alen Institute.

Name: Frank Gesualdi

Courses Taught:
A4024 Architectural Drawing and Representation II

Educational Credentials:
B.Arch., Syracuse University, 1999
M.S.A.A.D., Columbia University, 2004

Teaching Experience:
Visiting Professor, The Pratt Institute 2007-Present
Visiting Professor, Parsons The New School 2007-2011
Studio Co-Instructor, University of Pennsylvania, 2008-10

Professional Experience:
Project Designer, STUDIOS Architecture, Washington, DC 1999-2003
Senior Designer, Diller, Scofidio + Renfro, 2004-07
Principal, EFGH, New York, NY 2007-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Praxis: A Journal of Writing + Building, Issue 10 Urban Matters (2009)
Gateway: Visions for an Urban National Park, Princeton Architectural Press (2011)

Professional Memberships:
N/A

Name: Alistair Gill

Courses Taught (Four semesters prior to current visit in Spring 2013):
A4005 Advanced Architecture Studio V – Istanbul Hippodrome
A6145 Saturated Models

Educational Credentials:
B.A., Newcastle University, 1993
Dipl. Arch., Architectural Association, 1998
M.Res., London Consortium, 2001
PhD Candidate, London Consortium

Teaching Experience:
Visiting Professor, University of Arlington, 2001
Visiting Professor, Technical University of Ljubljana, 2002
Unit Master, Architectural Association London, 2002 – 2007
Adjunct Assistant Professor, Columbia University, 2007 - present
Visiting Faculty, RISD, 2012

Professional Experience:
Architect, Urban Research Laboratory London, 1999
Architect, Nicholas Grimshaw Architects London, 2000
Architect, Proun Architects London, 2000
Architect, Studio E Architects London, 2001
Co-Founder, Impossible Productions Ink London , 2002
Architect, Francisdesign London, 2003
Director, ipi-Go New York, 2010 – present
Director, Impossible Productions Ink LLC New York, 2009- present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Impossible Productions Ink LLC & ipi-Go: Multiple Articles in SuperYACHT Design Magazine and other Yacht Magazines
Numerous Articles through Architectural Association Papers, Journals and Project Reviews

Professional Memberships:
N/A

Name: Gill, Leslie, NCARB

Courses Taught:
A4006 Advanced Architecture Studio VI
A4005 Advanced Architecture Studio V

Educational Credentials:
B.Arch., The Cooper Union for the Advancement of Science and Art, 1982

Teaching Experience:
Thesis Critic, McGill University, 1992
Adjunct Assistant Professor, Parsons School of Design, 1987-1998
Adjunct Assistant Professor, Columbia University, 1990-1999
Visiting Critic, Harvard University, 1994-1999
Adjunct Associate Professor, Columbia University, 2000-2009
Visiting Critic, Cornell University New York Program, 2008-2009
Adjunct Professor, Columbia University, 2010-Present

Professional Experience:
Chermayeff and Geismar Associates, New York, NY 1978-1982
Bausman-Gill, New York, NY 1982-1994
Leslie Gill Architect, New York, NY 1995-Present

Licenses/Registration:
New York
New Jersey
Connecticut
Rhode Island
NCARB

Selected Publications and Recent Research:
Natural and Urban, Green and Grey, Innes Lamuniere, Roverto de Oliveira Castro (Harvard, 2009)

Professional Memberships:
Board Member, Van Alen Institute, New York, NY 1996-2008
Co-Chair, Chrysler Design Awards, New York, NY 1998-2004
Board Member, The Cooper Union for the Advancement of Science and Art, New York, NY 2000-2004
Board Member, Architectural League of New York, New York, NY 2008-Present
NAAB Accreditation, 2008-Present

Name: Cristina Goberna

Courses Taught:
A4001 Core Architecture Studio I
A4853 Advanced Architecture Studio
A4002 Core Architecture Studio II

Educational Credentials:
Arquitect, Escuela Técnica Superior de Arquitectura de Sevilla, 2001
Independent Studies Program (PEI), Museo de Arte Contemporaneo de Barcelona (MACBA), 2005
M.S.A.A.D, Columbia University, 2008
Graduate Certificate in Advanced Architectural Research. Columbia University, 2009
PhD Candidate, Escuela Técnica Superior de arquitectura de Barcelona (E.T.S.A.B)

Teaching Experience:
Adjunct Assistant Professor, Barnard and Columbia Colleges, Columbia University, 2011
Visiting Professor, Facultad de Arquitectura Diseno y Urbanismo (FADU), Universidad de Buenos Aires, Argentina, 2011
Adjunct Assistant Professor, Columbia University, 2011-2012

Professional Experience:
Architect, Ateliers Jean-Nouvel, 2005-2006
Architect, b720 Fermín Vázquez Arquitectos, 2005-2006
Architect, Forgas Arquitectos, 2006
Curator and Manager, Van Alen Books, Van Alen Institute, New York, 2011-2012
Director, Fake Industries Architectural Agonism, 2005 - Present

Licenses/Registration:
Spain

Selected Publications and Recent Research:
Fake Industries Architectural Agonism, PLOT Magazine n 8, Buenos Aires, 2012
From La Strada Novissima *to* The Street, Journal Speciale'Z n 3, Paris, 2012
Alcorcón Alternativen für die gescheiterte Boom-Town, Bauwelt 13, Berlin, 2012

Professional Memberships:
Col·legi d'Arquitectes de Catalunya (COAC)

Name: Mario Gooden, AIA

Courses Taught:
A4105 Advanced Studio V – Live II
A4106 Advanced Studio VI – Synapse(i)s
A4770 Neo-Conceptual: Art Politics and Architecture
A4105 Advanced Studio V – Parametricities: Live
A4106 Advanced Studio VI – Parametricities: Johannesburg
A4770 Neo-Conceptual: Art Politics and Architecture

Educational Credentials:
B.S. Design, Clemson University, 1987
M.Arch., Columbia University, 1990

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 1992
Assistant Professor, University of Florida, 1993 – 2001
Visiting Assistant Professor, Columbia University GSAPP, 2001 – 2004
Distinguished Visiting Professor, Syracuse University, Fall 2004
Louis I. Kahn Distinguished Visiting Professor, Yale University, Spring 2005
Adjunct Associate Professor, Yale University, Fall 2005 – Fall 2008
Professor of Practice, Columbia University, Fall 2009 – Present

Professional Experience:
Intern, Zaha Hadid Architect, London, 1989
Intern Architect, Steven Holl Architects, New York, 1992 – 1993
Principal, Mario Gooden Studio, Gainesville, Florida, 1993 – 1997
Principal, Huff + Gooden Architects, 1997 - present

Licenses/Registration:
New York
South Carolina

Selected Publications and Recent Research:
Global Topologies: Converging Territories. Mario Gooden, Editor. To be published Columbia University. Fall 2012
Emerging Voices, 20 Years. The Architectural League of New York. Fall 2012 – Spring 2013
MacDowell Colony Artist in Residence, *Abstract Topological Series*, Jul – Aug 2012
_ORM is a Four-Letter Word (That Starts with "F"). Mario Gooden, Author. *Perspecta* No. 43. The Yale Journal of Architecture. December 2010
Layered Urbanisms. Mario Gooden. Yale School of Architecture Books. 2008

Professional Memberships:
The American Institute of Architects

Name: Urtzi Grau

Courses Taught:
A4488 Arguments
A4853 Advanced Architecture Studio
A4006 Advanced Architecture Studio VI

Educational Credentials:
Architect, Escuela Técnica Superior de Arquitectura de Barcelona, 2000
M.S.A.A.D., Columbia University, 2004
Graduate Certificate in Media and Modernity. Princeton University, 2006
M.A., Princeton University, 2007
Ph.D. Candidate History and Theory of Architecture, Princeton University

Teaching Experience:
Assistant-in Instruction, SOA, Princeton. 2007 – 2011
Instructor Adjunct of Architecture, AAP, Cornell University, Fall 2008
Instructor Adjunct of Architecture, Irwin S. Chain School of Architecture of the Cooper Union 2008 - Present
Associate in Architecture, Columbia University, 2010 - Present

Professional Experience:
Architect, Coll-Leclerc, 1999-2001
Architect, b720 Fermín Vázquez Arquitectos, 2001
Architect, Gullicshen/Bormala- Costas-Gomez, 2002
Architect, Bailo-Rull Nadal, 2002
Architect, Arquitecturas Torres Nadal, 2003
Director, Fake Industries Architectural Agonism, 2006 - Present

Licenses/Registration:
Spain

Selected Publications and Recent Research:
“Lista de Correcciones” in UHF E.R.R.A, no.5, 2009.
“21st Century Housing” in Evolo no.1, Fall 2009.
“Drawing Transitional Domestic Dreams” in Panel Layout for Competition (Seoul, Damdi Publishing co., 2010)
Clip Stamp Fold: The Radical Architecture of Little Magazines 196X – 197X (Barcelona, Actar, 2010) image ed.

Professional Memberships:
Col·legi d’Arquitectes de Catalunya (COAC)

Name: Jennifer Gray

Courses Taught:
A4341 American Architecture II

Educational Credentials:
B.A. Art History, Criticism and Conservation, The University of Georgia, 1997
M.A. Art and Architectural History, University of Illinois at Chicago, 2001
M.Phil. Architectural History and Criticism, Columbia University, 2004
Ph.D. Architectural History and Criticism, Columbia University, 2011

Teaching Experience:
Instructor, Barnard College, 2003
Visiting Assistant Professor, Columbia, 2012

Professional Experience:
Intern, Frank Lloyd Wright Home and Studio, Oak Park, IL, 1999-2000
Freelance Educator, Department of Education, The Museum of Modern Art, 2004-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Robert Moses and the Modern City. (Il Giornale Dell'Architettura: 2007)
Design for the Other 90%. (Il Giornale Dell'Architettura: 2007)
Archive at MoMA Revisits the International Style. (Il Giornale Dell'Architettura: 2007)

Professional Memberships:
N/A

Name: Mark Green

Courses Taught:
A4715 ReThinking BIM
A4720 Meshing
A4813 Integrated Project Delivery
A4114 Architectural Technology IV

Educational Credentials:
B.S.Arch., University of Utah, 2004
M.Arch., Columbia University, 2008

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2008-2012

Professional Experience:
Intern, SHoP Architects, New York, NY 2007
Architectural Designer, SHoP Architects, New York, NY 2008-2009
Director, CASE Design Inc, New York, NY 2009-2012

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional **Memberships:**
The American Institute of Architects

Name: Toru Hasegawa

Courses Taught (Four semesters prior to current visit in Spring 2013):
ARCH A4006 Advanced Studio VI
ARCH A4707 Digital Detailing
ARCH A4711 Search: Advanced Algorithmic Design
ARCH A4793 App-itecture

Educational Credentials:
B.S., Hosei University, 2003
M.Arch., Columbia University, 2006

Teaching Experience:
Adjunct Professor, New York University Interactive Telecommunications Program 2008-2010
Visiting Professor, Washington University in St Louis Sam Fox School of Design, 2010
Adjunct Assistant Professor, Columbia University 2006-present

Professional Experience:
Intern, Maeda Norisada Atelier Tokyo, Japan 2002
Intern, Diller Scofidio+Renfro New York, NY 2004
Intern, nARCHITECT New York NY 2004
Intern, Xefirotarch New York, NY 2005
Principal, Proxy Design Studio LLC New York, NY 2003-present
Partner, Morpholio LLC, New York NY 2011-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
ALGODE 2011 Algorithmic Design for Architecture Conference, “Human Computer Interaction in Architecture: Exploring the Brain-Body-Environment Continuum”
Volume: Internet of Things. Archis 2011 #2. “Smart Environments” and “The Importance of Random Learning”
Machinic Processes: Architecture Biennial Beijing 2010 “Computing Kaizen”
Cloud Computing and Architecture Symposium, Osaka Sangyo University with Takashi Yamaguchi
Processing.org Digital Exhibitions, “Computing Kaizen”
Scripting Cultures “Architectural Design and Programming”
Informal Toolbox (Co-editor and author), Author and Designer. ISBN 9780982078303
ACADIA 2006 “Synthetic Landscapes” - The hexEnvelope system: a cross-platform embedding of material and software logic into descriptive geometry

Professional Memberships:
N/A

Name: Laurie Hawkinson

Courses Taught:
A4005 Advanced Architecture Studio V
A4006 Advanced Architecture Studio VI

Educational Credentials:
B.F.A., University of California at Berkeley, 1970-1974
M.A., University of California at Berkeley, 1974-1975
The Independent Study Program, Whitney Museum, New York City, 1976
B.Arch., the Cooper Union, New York City, 1980-1983

Teaching Experience:
Visiting Critic, University of Miami School of Architecture, 1985
Visiting Critic, Harvard University Graduate School of Design, 1988-1989
Adjunct Professor of Architecture, Columbia University, 1986, 1990
Saarinen Chair, Yale University School of Architecture, 1990
Adjunct Assistant Professor, Parsons School of Design, 1983-1992
Visiting Critic in Design, Southern California Institute of Architecture, 1990-1993
Assistant Professor of Architecture, Columbia University, 1992-1994
Design Critic in Architecture, Institute for Advanced Architectural Studies, Venice, Italy, 1994-1999
Associate Professor of Architecture, Columbia University, 1995-2005
Professor of Architecture, Columbia University, 2005-present

Professional Experience:
Director, Exhibitions Program, Institute for Architecture and Urban Studies, New York City, 1978-1980
Curator, “John Hejduk: Seven House.”; Curator with Rem Koolhaas, “Wallace Harrison: Architect.” 1978-1980
Co-curated and organized traveling of exhibitions: “A New Wave of Austrian Architects”, “A New Wave of Japanese Architecture”, “Ivan Lednidov”, and others, 1978-1980
Venturi, Rauch & Scott Brown, New York City, 1981-1982
Partner, Smith-Miller + Hawkinson Architects LLP, New York City, 1983-present

Licenses/Registration:
New York
NCARB Certified

Selected Publications and Recent Research:
N/A

Professional Memberships:
Board of Governors, New York Foundation for the Arts, 1991-1995
Member of the Resource Team for at the 29th and 30th meeting of The Mayors’ Institute on City Design, 2001-2002
Member of the Design Review Board, Ohio State University, 1999-2003
Board of Directors, The Architectural League, New York City, 1991-2007
Board of Directors, The Wooster Group, New York City, 1985-present
Peer Reviewer, General Services Administration, 1997-present
The Contemporary Arts Council, The Museum of Modern Art, 2003-present

Name: Robert A. Heintges, FAIA

Courses Taught:
ARCH A4634 Advanced Curtain Wall

Educational Credentials:
B.A., Rice University, 1970
B.Arch., Rice University, 1971

Teaching Experience:
Adjunct Professor, Columbia University, 1990-present
Guest Lecturer, Harvard University, 1999-present

Professional Experience:
Senior Associate, I.M. Pei and Partners, New York, 1974-1989
Founding Partner, Heintges & Associates, New York, 1989-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
Quaternario, "Semantics of the Curtain Wall" (1995)
Praxis: Journal of Writing & Building, Issue One, "Reflections on Glass" (2000)
Docomomo US VIII Conference Proceedings, "The United Nations Complex and the Secretariat Curtain Wall" (2004)
Engineered Transparency—The Technical, Visual, and Spatial Effects of Glass, Demands on Glass Beyond Pure Transparency" *(2009)*

Professional Memberships:
Fellow of the American Institute of Architects
NYC Office of the Mayor Green Codes Task Force (since 2007)
GSA National Register of Peer Professionals (since 2006)
Construction Specifications Institute
American Society of Testing & Materials
American Architectural Manufacturers Association

Name: Juan Herreros Guerra

Courses Taught:
A6180 Architectural Practice as a Project, Seminar.
A4006 Advanced Architecture Studio VI

Educational Credentials:
Architect, Escuela Técnica Superior de Arquitectura de Madrid, Spain. 1985
Ph.D, Escuela Técnica Superior de Arquitectura de Madrid, Spain. 1994

Teaching Experience:
Lecturer Employed, Architectural Association, London, 1998-1999
Visiting professor, École Polytechnique Fédérale, Lausanne, 1999-2000
Morgerstern Visiting Chair in Architecture, Illinois Institute of Technology, 2007.
Labaton Lecturer, Princeton University, 2003-2007
Visiting Professor, Columbia University, 2007-2011
Professor, Department of Architectural Projects, Escuela Técnica Superior de Arquitectura de Madrid, 1995-2010.
Chair Professor, Escuela Técnica Superior de Arquitectura de Madrid, 2010-present.
Associate Professor, Columbia University, 2011-present.

Professional Experience:
Principal, Ábalos & Herreros, 1984-2005
Principal, Herreros Arquitectos, 2006 to present

Licenses/Registration:
Spain

Selected Publications and Recent Research:
Tower & Office (MIT Press)
Caducidad, Educación y Energía (fundación COAM)
Isla-Ciudad (Actar)
Palacios de la Diversión (Mairea)
Vivienda y espacio doméstico en el s.XXI (La casa encendida)

Professional Memberships:
Member of the Spanish Architects Association Colegio de Arquitectos, Madrid delegation. 1986
RIBA Internacional Fellow by the Royal Institute of British Architects 2008
Member of the Independent Association of Architets AxA, Barcelona. 2010

Name: Arthur Jay Hibbs, RA, AIA, LEED AP

Courses Taught:
A4114 Architectural Technology IV
A4115 Architectural Technology V

Educational Credentials:
B.Arch., The Cooper Union for the Advancement of Science and Art, 1980

Teaching Experience:
Adjunct Associate Professor, Columbia University, 1987-present

Professional Experience:
Project Architect, Polshek Partnership, New York, NY 1985-1990
Principal, Hibbs Architects, New York 1992-present

Licenses/Registration:
New York
New Jersey
Connecticut

Selected Publications and Recent Research:
Education of an Architect, (Rizzoli, 1991).
Marist College Journal (2011)
New York Times (2012)

Professional Memberships:
The American Institute of Architects

Name: Mimi Hoang, AIA

Courses Taught:
A4006 Advanced Architecture Studio VI: Rio Super Hospital
A4006 Advanced Architecture Studio VI: Parallel MoMA

Educational Credentials:
B.A. Massachusetts Institute of Technology, 1993
M.Arch. Harvard Graduate School of Design, 1998

Teaching Experience:
Visiting Professor, Harvard Graduate School of Design, 2008
Adjunct Assistant Professor, Yale University, 2003-present
Adjunct Assistant Professor, Columbia University, 2008-present

Professional Experience:
Designer,Teun Koolhaas, Amsterdam, 1993-1994
Designer, Leers Weinzapfel Associates, 1998-1999
Designer, Steven Holl Associates, 1999-2001
Founding Principal, nARCHITECTS PLLC, 1999-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
nARCHITECTS - Eric Bunge & Mimi Hoang (2000-2008), (Design Documents, Damdi, 2008).
Provisional: Emerging Modes of Architectural Practice, (Princeton Architectural Press, 2011)

Professional Memberships:
The American Institute of Architects

Name: Phu Hoang, AIA

Courses Taught:
A6005 Advanced Architecture Studio V: Global Metropolis Moscow
A6853 Advanced Architecture Studio

Educational Credentials:
B.S.Arch., Georgia Institute of Technology, 1996
M.Arch., Columbia University, 1999

Teaching Experience:
Lecturer, University of Pennsylvania, Philadelphia, 2007-2011
Adjunct Assistant Professor, Columbia University, New York, 2011-present

Professional Experience:
Designer, Michael Hopkins and Partners, London, 2000-2001
Project Director, Bernard Tschumi Architects, New York, 2001-2006
Principal, Phu Hoang Office, New York, 2006-2012
Principal, MODU, New York/London, 2012-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
No Man's Land in *Monitor* (November 2008)
No Man's Land in *Mark* (November 2008)
No Man's Land in *Islands: Contemporary Architecture on Water*. (H.F. Ullmann, 2009)
Exhale in *The Art Newspaper* (1 December 2010)
Water Wrapper in *Sustainable Solutions for Water Resources*. (Wiley, 2010)
Young Architects 11: Foresight. (Princeton Architectural Press, 2010)
Lighter than Air in *Boston Globe* (5 May 2011)
Lighter than Air in *Architect's Newspaper* (20 April 2011)
Exhale in *Icon* (February 2011)
Exhale in *A Touch of Code: Interactive Installations & Experiences*. (Gestalten, 2011)
Exhale in *The Sky's the Limit: Applying Radical Architecture*. (Gestalten, 2012)
Water Wrapper in *DIRT*. (MIT Press, 2012)
No Man's Land in *Futuristic: Visions of Future Living.* (daab, 2012)

Professional Memberships:
The American Institute of Architects
NCARB

Name: Steven Holl, FAIA

Courses Taught:
A4005 Advanced Architecture Studio V
A4006 Advanced Architecture Studio VI

Educational Credentials:
B.Arch., University of Washington, 1970
Post-graduate studies, Architectural Association, London, 1976

Teaching Experience:
Adjunct Professor, Columbia University, 1981-1989
Professor of Architecture, Columbia University, 1989-Present

Professional Experience:
Principal, Steven Holl Architects, 1976 -Present

Licenses/Registration:
New York New
Jersey
Massachusetts
Missouri
Texas Virginia
Washington, D.C.
Washington

Selected Publications and Recent Research:

Anchoring: Selected Projects 1975-1988. Intro. Kenneth Frampton. New York: Princeton Architectural Press, 1989.
Intertwining: Selected Projects 1989--1995. New York: Princeton Architectural Press, 1996.
Parallax. New York: Princeton Architectural Press, 2000.
Written in Water. Baden: Lars Muller Publishers, 2002.
Idea and Phenomena. Ed. Architekturzentrum Wien. Baden: Lars Muller Publishers, 2002.
Steven Holl - Architecture Spoken. New York: Rizzoli International Publications, 2007
House. Black Swan Theory New York: Princeton Architectural Press, 2007
Urbanisms: Working with Doubt, New York: Princeton Architectural Press, 2009
Horizontal Skyscraper, San Francisco: William Stout Architectural Books, 2011
Scale, Baden: Lars Muller Publishers,2012
Color Light Time, Baden: Lars Muller Publishers, 2012.

Professional Memberships:
The American Institute of Architects

Name: Jyoti Hosagrahar

Courses Taugh:
A4517 Exotic Moderns: City, Space, and Other Modernities

Educational Credentials:
B.Arch., School of Planning & Architecture, New Delhi, India, 1986
M.Planning, University of Southern California, Los Angeles, 1989
Ph.D., University of California, Berkeley, Department of Architecture, 1997

Teaching Experience:
Assistant Professor, University of Oregon, Department of Architecture, 1997-2003
Adjunct Professor, The City College, City University of New York, 2006
Adjunct Associate Professor, Columbia University, 2005 - present
Visiting Professor, Srishti School of Art and Technology, Bangalore, India, 2007-present

Professional Experience:
Chair of Planning History papers, Association of the Collegiate Schools of Planning, USA, 2006-2009
Expert, UNESCO International Working Group on Historic Urban Landscape Recommendation, Feb 2010, Paris.
Expert Consultant, UNESCO, Paris, Culture Sector. For initiative on Culture and Development, July 2011- March 2012.
Editorial Advisor, *Traditional Dwellings and Settlements Review*, (UC Berkeley), 2002-present
Editorial Board Member, *Buildings and Landscapes* (Johns Hopkins), Oct 2006-present
Board Member, Society of American City and Regional Planning History, 2007-present
Editorial Board Member, *Journal of Planning History,* (Routledge), 2007-present
Expert Member, National Advisory Committee for World Heritage Matters, Ministry of Culture, Government of India, November 2011 - present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Indigenous Modernities: Negotiating Architecture and Urbanism. 2005
New Delhi: Routledge, 2005. (International Planning History Society Book Prize, 2006)
Interrogating Difference: Postcolonial Perspectives in Architecture and Urbanism. In *A Handbook of Architectural Theory* edited by Craig Crysler, Stephen Cairns, and Hilde Heynen. New York: Sage, forthcoming, 2011
Why Development Needs Culture. With Francesco Bandarin and Frances Albernaz. In the *Journal of Cultural Heritage Management and Sustainable Development*, vol. 1, no. 1, June 2011.
Heritage and Modernity in India. In *The Routledge Handbook of Heritage in Asia* edited by Patrick Daly and Tim Winter. London: Routledge, forthcoming.

Professional Memberships:
Society for American City and Regional Planning History
ICOMOS

Name: Christopher Hoxie

Courses Taught:
A4542 Imagining the Unreal
A4534 Techniques of the Ultrareal

Educational Credentials:
Visual Arts, Architecture / Sculpture, Bennington College, 1992
M.Arch., Harvard University, 2007

Teaching Experience:
Visiting Instructor, University of Pennsylvania School of Design, 2003
Lecturer, Harvard University, 2008-present
Adjunct Assistant Professor, Columbia University, 2009 - present

Professional Experience:
Intern Architect / Project Manager, Thompson and Rose Architects, MA, 1997 - 1999
Intern Architect / Project Manager, CR Studio, NY, 1999 – 2001
Senior Designer, KDLAB, NY, 2001 – 2003
Designer and Design Systems Consultant, Preston Scott Cohen Architect, 1996-2007
Principal, BHCH LLC, Brooklyn, NY, 2004 - 2007
Designer and Design Systems Consultant, Mack Scogin Merrill Elam Architects, 2003-2012
Principal, Chris Hoxie Design LLC, Brooklyn, NY, 2007 - 2012
Designer / Principal, March, NY, 2007 – Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Provisional Practice: Emergent Modes of Production in American Architecture, (Dreyfous, Kedan, Mutter, 2009)

Professional Memberships:
The American Institute of Architects

Name: Jeffrey Huang, LEED AP

Courses Taught :
A4115 Architectural Technology V

Educational Credentials:
B.S. Mechanical and Aerospace Engineering, Cornell University, 1999
S.M. Building Technology, Massachusetts Institute of Technology, 2001

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2011-Present

Professional Experience:
Associate, Arup, New York, 2001-Present

Licenses/Registration:
New York

Selected Publications and Recent Research:
N/A

Professional Memberships:
American Society of Heating, Refrigerating and Air-Conditioning Engineers

Name: Scott Hughes

Courses Taught:
A4115 Architectural Technology V

Educational Credentials:
B.A. Architecture, University of California, Berkeley, 1993
M. Eng. Structural Engineering, University of Minnesota, Twin Cities, 1995

Teaching Experience:
Lecturer, Cornell University, New York City, 2006
Assistant Adjunct Professor, Columbia University, New York City, 2011-2012
Adjunct Professor, The New School – Parsons School of Design, NYC, 2010-2012

Professional Experience:
Structural Engineer, Bakke Kopp Ballou & MacFarlane, Minneapolis, MN 1995-1997
Associate, Robert Silman Associates, New York City, 1997-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
N/A

Professional Memberships:
American Society of Civil Engineers (ASCE)
Structural Engineers Association of New York (SEAoNY), President-Elect

Name: Jeffrey Inaba

Courses Taught:
A4006 Advanced Architecture Studio VI
A6778 Imperatives of Urbanism
A4038 C-LAB Seminar: New Maps for Aging Cities

Educational Credentials:
A.B., University of California at Berkeley,
M.Arch., Harvard University,
M.A. Philoshophy of Architecture, Harvard University,
M.A. Design Studies, Harvard University,

Teaching Experience:
Director, Southern California Institute for Future Initiatives, Southern California Institute of Architecture, -2011
University of California at Los Angeles
Harvard University
Adjunct Assistant Professor, Columbia University, -Present
Director, C-LAB, Columbia University, -Present

Professional Experience:
OMA
Principal, AMO, Rotterdam
Founder and Principal, INABA Inc., -Present
Features Editor, Volume Magazine, -Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Great Leap Forward: The Harvard Design School Project on the City.
World of Giving (Columbia University GSAPP: 2010)
INABA has been published in *The Financial Times, FRAME, Mark Magazine, Urban China, Domus, Art Review, Artforum, The New York Times, Archinect* and *BLDGBLOG.*

Professional Memberships:
N/A

Name: Jason Paul Ivaliotis

Courses Taught:
A4782: Fast Forward

A4141: Beyond Prototype

Educational Credentials:
B.A. Architecture, Miami University, Ohio, 2003
M.Arch., Columbia University, 2007

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2008-present
Graduate Teaching Assistant, Columbia University, 2005
Undergraduate Teaching Assistant, Miami University, 2001-2003

Professional Experience:
Architectural Job Captain, Venezia & Associates, New Brunswick, NJ 2002-2003
Architectural Intern, HLW International, New York, NY 2005-2006
Architectural Designer, Samoo Architecture PC, New York, NY 2007-2008
Architectural Designer, FXFOWLE Architects, New York, NY 2008
Architectural Designer, Tsao & Mckown Architects, New York, NY 2009
Partner / Design Director, Versa Design LLC, New York, NY 2010-present
Architect III, HNTB Architecture, New York, NY 2010-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"Ground Up from Ground Zero: Eight Years Later", Archinect.com, (September 2009)
"Composing the Personal Narrative Parts I & II", Archinect.com, (August - November 2009)
"Composing the Personal Narrative", *Portfolio*, Seoul: Damdi Publishing, (June 2010)
"(Re)centering the Square," Writer / Producer: Jason Ivaliotis, Director: Elba Calado, Versa + Lero Lero Productions, (June 2010)
"Versa Design", *Architectural Model – Lead to Design*, Seoul: Damdi Publishing, (September 2010)
"Professional Portfolio Excerpts", Linton, Harold, *Portfolio Design*, 4th Edition, London: W.W. Norton & Company Ltd., (2012)
"Fast Forward", Archinect.com, (January 2012)

Professional Memberships:
Emerging New York Architects Committee of the American Institute of Architects

Name: Mike Jacobs, AIA, LEED AP

Courses Taught:
A4005 Advanced Architecture Studio V
A4006 Advanced Architecture Studio V
A1003 Introduction to Architecture

Educational Credentials:
B.A., Lehigh University, 1992
M.Arch., Columbia University, 1997

Teaching Experience:
Adjunct Professor, Woodbury University, Burbank, 2002, 2006-2007
Lecturer, California Polytechnic University, Pomona, 2002-2003
Adjunct Professor, Otis College of Art & Design, Los Angeles, 2002-2003
Adjunct Assistant Professor, Columbia University, 2008 - present

Professional Experience:
Owner, Orenj, Inc, Los Angeles, 2001-2006
Owner, Mike Jacobs Architecture, New York 2006-present

Licenses/Registration:
California New York
LEED AP

Selected Publications and Recent Research:
N/A

Professional Memberships:
The American Institute of Architects

Name: Jeffrey Johnson, RA, AIA

Courses Taught:
A4356 Contemporary Chinese City
A4003 Core Architecture Studio III
A4006 Advanced Architecture Studio VI

Educational Credentials:
B.S. Environmental Design, Ball State University, 1990
B.Arch., Ball State University, 1990
M.Arch., Ball State University, 1992

Teaching Experience:
Adjunct Assistant Professor, Illinois Institute of Technology, 2003
Adjunct Assistant Professor, Columbia University, 2006-present
Director, China Megacities Lab, Columbia University, 2008-present

Professional Experience:
Intern, Stiftgasse Architektur, Vienna 1993
Intern, Bernhardt Associates, Chicago 1993
Designer, Michael Sorkin Studio, New York 1994
Designer, Asymptote, New York 1994
Project Architect, James Bodnar Architect, New York 1995-1997
Principal, Bowerylab Design, New York 1996-2001
Project Architect, OMA, Rotterdam/New York 2001-2003
Principal, SLAB architecture, PLLC, New York 2003-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
Beijing (essay) (306090 Books, 2008)
Advantageous Negotiations between Production and the City, Shanghai (2010)
Profile: China Lab Research (T+A Magazine (China), 2010)
West Meets West: Chengdu & Xi'an (Summer 2011 – Chengdu 2011 Biennale)
Future of the Museum in China (Summer 2012)
China Lab Guide to Megablock Urbanism (Forthcoming, Actar, 2013)

Professional Memberships:
The American Institute of Architects

Courses Taught
A4001 Core Architecture Studio I
A4005 Advanced Architecture Studio V

Educational Credentials:
Dipl. Arch-Eng, Aristotle University of Thessaloniki, 2001
SMArchS, Massachusetts Institute of Technology, 2004
M.A., Princeton University, 2007

Teaching Experience:
Visiting Assistant Professor, Pratt Institute, 2011
Global Networking Program, Columbia/AUTh Summer Workshop in Greece (Summer 2011)
Adjunct Assistant Professor, Cooper Union, 2009-present
Adjunct Assistant Professor, Columbia University, 2010-present

Professional Experience:
Project Architect, Olympics 2004 Research design grants (2001-2003)
Project Architect, dECOi _ MIT Digital Design Group (2003-2005)
Principal & Founder, EcoRedux Network, (2009-present)
Senior Associate, Cooper Union Institute of Sustainable Design (2012-present)

Licenses/Registration:
Professional Architect's License, EU

Selected Publications and Recent Research:
"EcoRedux: Design Remedies for an Ailing Planet", Special Issue of *Architectural Design* magazine (AD), (London: Wiley and Sons, 2010).
Déjà Vu: Environmental Architecture from "Object" to "System" to "Cloud", PRAXIS: A Journal of Writing + Building, Issue: Eco-Logics, No.13 (2012).
I have a lump stuck in my throat!, Log, No.25 (Reclaim Resi[lience]stance) Any Corporation. (2012)
Clearings in a Concrete Jungle (Multimedia Review), Journal of the Society of Architectural Historians, Vol.70, No.1 (Berkeley, CA: University of California Press).
The Envirobubble & EcoRedux Manifesto, S.L.U.M Lab newspaper (Sustainable Living Urban Model), (with Michael Young) Spring 2011.
Return to Earth: Feedback Houses, The Cornell Journal of Architecture, Issue 8: RE (Ithaca, NY: Cornell University, 2011).
No More Schisms (Introduction to the issue), *The Soft Cosmos of AD's Cosmorama & Dross City* in Architectural Design magazine (AD), Profile No.208 (London: Wiley & Sons, November-December 2010).
Dry Rot: The Chemical Origins of British Preservation, Future Anterior, Vol.7, No.1 Summer 2010, peer-reviewed (Minneapolis: University of Minnesota Press).
At Home in Utopia, "The Architect's Newspaper," (New York), No.5, 03.17.2010.
Feedback Man, Log. No.13/14, Any Corporation. (2008)
Felt Vacuum Wall, Pidgin, No.6, Princeton Architectural Press. (with Tsamis, A. 2008)
Ducks Versus Joules: Electric Visions of Las Vegas in the Energy Crisis, Thresholds, No. 33, Issue: Formalism, Massachusetts Institute of Technology. (2008)
Dross in Kit McCullough and Douglas Kelbaugh (Eds), Writing Urbanism: A Design Reader (New York: Routledge, 2008).
Materials off the Catalogue, Thresholds, No. 31, Massachusetts Institute of Technology. (2006)
The Teleplastic Abuse of Ornamentation, 306090, No.10, Princeton Architectural Press. Kallipoliti, L, Tsamis, A, (2006)

Professional Memberships:
Technical Chamber of Greece

Name: Victor Keto

Courses Taught:
A4004 Advanced Architecture Studio IV - CBIP (Technical Advisor)

Educational Credentials:
B.Arch., New Jersey Institute of Technology, 2004
M. Eng. Product Architecture and Design, Stevens Institute of Technology, 2006

Teaching Experience:
Adjunct Instructor, Stevens Institute of Technology, 2006
Adjunct Assistant Professor, Columbia University, 2010-2012

Professional Experience:
Intern, Hillier Architecture, Newark, NJ 2003-2004
Intern, Gehry Technologies, 2005-2006
Consultant, Gehry Technologies 2006-2009
Senior Automation Consultant, Gehry Technologies 2009-2012
Technical Project Manager, Gehry Technologies 2012

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Nico Kienzl

Courses Taught:
A4112 Architectural Technology II: Environmental Systems/ MEP

Educational Credentials:
Dipl. Ing. Architecture, Technical University Munich, 1995
M.S.Building Technology, Massachusetts Institute of Technology, 1999
D.Des, Graduate School of Design, Harvard University, 2002

Teaching Experience:
Visiting Lecturer, Pratt Institute, 2002-2007
Visiting Lecturer, Harvard University, 2010-11
Adjunct Assistant Professor, Columbia University, 2008-present

Professional Experience:
Director, Atelier Ten, New York, 2002-present

Licenses/Registration:
LEED BD+C

Selected Publications and Recent Research:
Mat Buildings & Environment: Examination of a Typology (HARVARD UNIVERSITY, 2005)
Smart Materials and Technologies in Architecture (ARCHITECTURAL PRESS, 2005)
Evaluating Dynamic Building Materials (HARVARD UNIVERSITY, 2005)
Blurring the Lines (WILEY-ACADEMY, 2006)

Professional Memberships:
ASHRAE

Name: Janette Kim

Courses Taught:
A6160 Known Unknowns: Architecture's Ecological Consciousness
A4004 Advanced Architecture Studio IV
A4001 Core Architecture Studio I
A4757 Support
A4753 Life

Educational Credentials:
B.A., Columbia College, Columbia University, 1997
M.Arch., Princeton University, 2001

Teaching Experience:
Assistant Instructor, Princeton University, 1999-2000
Howard E. Lefevre Fellow for Emerging Practitioners, Ohio State University, 2002-2003
Adjunct Assistant Professor, Rensselaer Polytechnic Institute, 2003-2005
Clinical Professor, Rensselaer Polytechnic Institute, 2006
Adjunct Assistant Professor, Barnard + Columbia Architecture, 2005-2010
Adjunct Assistant Professor, Columbia University, 2005-current

Professional Experience:
Junior Designer, Design Laboratories, NY, NY 1997
Junior Designer, Maya Lin Studio, NY, NY 1998
Intern, RoTo Architects. 1999
Junior Designer, Diller + Scofidio, NY, NY. 2002
Project Leader, Laura Kurgan Design, NY, NY. 2000-2004
Founding Principal, All of the Above, 2001-present
Director, Urban Landscape Lab, GSAPP, 2008-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"Beyond Recreation: Emerging Concepts of Nature and Public Engagement in Art and Popular Media," Designing the Parks conference, San Francisco, December 2008.
"Crisis in Crisis: Biosphere 2's Contested Ecologies," with Erik Carver in *Volume 20: Storytelling* and *Urban China Bootlegged*, 2009.

Professional Memberships:
N/A

Name: Karel Klein

Courses Taught
A4002 Core Architecture Studio II

Educational Credentials:
B.S. Arch., University of Illinois, Urbana-Champaign, Urbana, IL, 1992
B.S. Civil Engineering, University of Illinois, Urbana-Champaign, Urbana, IL, 1993
M.Arch., Columbia University, New York, NY, 1996

Teaching Experience:
Lecturer, The University of Pennsylvania, Fall 2004
Ruth and Norman Moore Visiting Professor, Washington University, Spring 2009
Adjunct Associate Professor, The Pratt Institute, 2007-present
Adjunct Assistant Professor, Columbia University, 2011-present

Professional Experience:
Project Architect, Dean Wolf, New York, NY, 1995-2000
Director, Ruy Klein, New York, NY, 2000-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
"9/11: The Road Back," *The New York Post*, Dec 7, 2003, pp. 22-23
"Artificial Sky," *New Architecture*, issue 8, 2005
"Knot Garden," *Archiworld*, October 2007
Sonia Zjawinski, "Heated Architecture Competition Inspires Creative Solutions," Wired, June 2007
David Sokol, "Ruy Klein," *Surface*, October, 2009
Ludovica Tramontin, "Klex," *Compasses 3*, March 2009
"Tool-Hide," in Lisa Iwamoto, Digital Fabrications: Architectural and Material Techniques, Princeton Architectural Press, 2009
"Ruy Klein," *Machinic Processes, Architecture Biennial Beijing 2010*, October 2010
"Ruy Klein," *Life In:formation, On Responsive Information and Variations in Architecture, Proceedings of Acadia 2010,* October, 2010
"Ruy Klein," in Eric Goldemberg, Digital Pulsations, 2011

Professional Memberships:
N/A

Name: Craig Konyk, AIA

Courses Taught:
A4004 Advanced Architecture Studio IV
A4005 Advanced Architecture Studio V

Educational Credentials:
B.A. Architecture, Catholic University, 1981.
M.Arch., University of Virginia, 1983.

Teaching Experience:
Special Lecturer/First Year Design Studio Coordinator NJIT SOA, 1989-2000.
Adjunct Assistant Professor, City College NYC, 2001-2002.
Lecturer/Studio Critic, Parsons School of Design NYC, 1989-2004.
Visiting Critic, Syracuse University, 2004, 2012.
Adjunct Assistant Professor, Columbia University 2002-present.
Adjunct Associate Professor, Pratt Institute, 2008-present.

Professional Experience:
Project Designer, Skidmore, Owings & Merrill, NYC, 1984-1985.
Project Architect, Smith-Miller + Hawkinson Architects NYC, 1985-1989.
Principal, KONYK architecture pc, Brooklyn NY, 1989-present.

Licenses/Registration:
New York

Selected Publications and Recent Research:
(Malin+Goetz) featured in *Praxis 9: Expanding Surface 2007*
CLOUD09 included in *future10* New York City issue, published by *arquitecturas futura, s.l.* 2008
Girasole & Hybrid House featured on ArchDaily 2009
flatfield published in Architect's Newspaper Blog, June 2010.
(Malin+Goetz) UWS store featured in *Architect's Newspaper* March, 2010
(Malin+Goetz) UWS store featured in *Interiors Magazine* January, 2010
culturepark (Museum of Polish History Competition Entry) on ArchDaily Jan 30, 2010
Exhibition Design; *"The Rise and Fall of Apartheid: Photography and the Bureaucracy of Everyday Life."* at the ICP Midtown, 2012.

Professional Memberships:
The American Institute of Architects
Executive Committee, Architectural League of New York
Advisory Board, Architect's Newspaper

Name: Zachary Kostura, PE

Courses Taught:
A4118 Exalted Structure
A4006 Advanced Architecture Studio VI

Education Credentials:
B.S. Physics, James Madison University, 2002
B.S. Integrated Science and Technology, James Madison University, 2002
M.Eng., Massachusetts Institute of Technology, 2003

Teaching Experience:
Adjunct Professor, New York Institute of Technology, 2007-2008
Adjunct Professor, New York University, 2009-present
Adjunct Assistant Professor, Columbia University, 2010-present

Professional Experience:
Structural Engineer, Arup, New York City, 2003-Present

Licenses/Registration:
California

Selected Publications and Recent Research:
Kostura, Z., "Analysis of Surface and Electrical Properties in Bonder Tip Materials" Journal of the Virginia Academy of Science, 2002.
Kostura, Z., "Pork Barrels and Boondoggles: Lessons Learned from the Era of Urban Automobile Infrastructure Development and Corresponding Implications for the Future of American Cities" Massachusetts Institute of Technology, 2003.
Kostura, Z.; Morrow, E.; Urick, B. "Design and Analysis Integration for a Cable Net Structure: A Centralized Database Approach" International Association of Shell and Spatial Structures, 2007.

Professional Memberships:
The Structural Engineers Association of New York 2005 - Present

Name: Kunio Kudo

Course Thought:
ARCH A6390 Post War Japanese Architecture
ARCH A4344 Traditional Japanese Architecture
ARCH A4005 Advanced Studio V

Educational Credential:
B.Arch., Tokyo Institute of Technology, 1963
M.Arch., Tokyo Institute of Technology, 1965
D.Eng., Tokyo Institute of Technology, 1969
M.Arch. Harvard University, 1978

Teaching Experience:
Post-Doc Fellow, University of Pennsylvania, 1969-1971
Research Associate, Tokyo Institute of Technology, 1972
Associate Professor, Nagoya Institute of Technology, 1972-1981
Visiting Professor, Brown University, 1977-1978
Visiting Professor, Nova Scotia Technical University, 1980
Adjunct Assistant Professor, Columbia University, 1984-present

Professional Experience:
N/A

License/Registration
New York
Japan

Selected Publication:
The Theory of Planning (Japanese, Keikakuron, Chuokoron, 1968)
Aesthetics of Methodology (Japanese, Hohonobigaku, 1972)
Three Souls of Architecture-Love, Reason and Violence
(Japanese,Kenchikunomittsunotamashii, Inoueshoin,1973)
My Louis Kahn (Japanese, Watashinoruisukaan, Kajima Publishing, 1974)
Philosophy of Louis Kahn (Japanese, Ruisukaanron, Shoukokusha, 1980)
Four Lectures on Louis I Kahn (Japanese, Koza: Ruisukaan, Meigennsha, 1981)
Seven Headquarters.(ITOKI, 1990)
Japanese Building Practice (Van Nostrand Reinhold,1997)

Professional Memberships:
N/A

Courses Taught:
A4001 Core Architecture Studio I
A4002 Core Architecture Studio II

Educational Credentials:
B.Arch., Angewandte / University of Applied Arts - Vienna, 2000
Diploma, Berlage Institute - Rotterdam, 2001
Thesis, Cooper Union, Irwin S. Chanin School of Architecture, 2002
M.Arch., Angewandte / University of Applied Arts – Vienna, 2006
PhD, Angewandte / University of Applied Arts – Vienna, 2012

Teaching Experience:
Tutor, Angewandte / University of Applied Arts - Vienna, 2002-2006
Visiting Professor, SCUT – Southern China University of Technology - Guangzhou, 2003
Design Critic, SciArc, Southern California Institute of Architecture – L.A., 2003
Assistant Professor, OSU - Ohio State University Knowlton School of Architecture, 2004/05
Assistant Professor, Cooper Union, Irwin S. Chanin School of Architecture – NY, 2007/08
Assistant Professor, Pratt Institute, School of Architecture – NY, 2007-2012
Visiting Professor, Cornell University, AAP – Ithaca, NY, 2008/09/10
Adjunct Assistant Professor, Columbia University, GSAPP – NY, 2010 - present

Professional Experience:
Design Architect, Coop Himmelb(l)au, Vienna, Austria 1999-2002
Design Architect, Coop Himmelb(l)au MEX, Guadalajara, Mexico 2002-2003
Design Architect, Coop Himmelb(l)au L.A., Los Angeles, USA 2003-2004
Project Architect, Coop Himmelb(l)au Guangzhou, Guangdong, P.R. China 2004
Partner, Lebbeus Woods Atelier, 2004-present
Principle, c.a.k productions, New York, Los Angeles, Vienna, 2006-present
Director / Partner, ForwardSlash, New York, Vienna, Paris, 2008-present

Licenses/Registration:
Austria

Selected Publications and Recent Research:
System Wien, Anthony Vidler, Peter Noever, Lebbeus Woods, Christoph a. Kumpusch (MAK/Hatje Cantz, 2006)
Idea(U)topsy, (Paperchase, 2009)
IDEA(L), (Paperchase, 2009)
Changing Lanes, (Cornell Press, 2010)
Detail Kultur: If Buildings Had DNA – Case Studies of Mutations, (Paperchase 2012)

Professional Memberships:
Co-Founding Editor of the magazine “Prinz Eisenbeton”, A
International MAK – Museum of Applied Arts Los Angeles Directors Advisory Board
Citizen Diplomat Los Angeles, International Visitors Council Los Angeles, USA
Member of the Architectural League New York, USA
Member of FOS, Friends of the Schindler House, Los Angeles, USA
Member of the Cooper Union Alumni Association, USA
Member of the ArtG, Austria, Europe
Member of the Society for Revitalization and Activation, Nu-Pora, Argentina
Member of the Commission for Education in Architecture, Western Europe
Member of Editorial Advisory Board for Controspazio / UNESCO, Italy, Europe

Name: Laura Kurgan

Courses Taught:
A4003 Core Architecture Studio III
A4004 Advanced Architecture Studio IV: Columbia Building Intelligence Project
A4568 Seminar: Mapping Global New York City
A4571 Seminar: Stillspotting.

Educational Credentials:
B. A. in Architecture, University of California, Berkeley, 1984.
M. Arch., Columbia University, 1988.

Teaching Experience:
Adjunct Professor, School of Architecture, Rensselaer Polytechnic Institute, 1994-95
Lecturer, Department of Architecture, University of Pennsylvania, 1995-1996
Critic in Architectural Design, School of Architecture, Yale University, 1996 -1998
Lecturer, School of Architecture, Princeton University, 1998-2000
Assistant Professor, School of Architecture, Princeton University, 2001 - 2004
Director, Spatial Information Design Lab, Columbia University, June 2004-present
Director of Visual Studies, July 2004-present
Associate Professor of Architecture, Columbia University, July 2011 - present

Professional Experience:
Principal, Laura Kurgan Design LLC, New York, 2005-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"Architecture and Justice," on the geographies of incarceration and reentry. 2006
"Million Dollar Blocks: The Pattern," a 'pattern book' of million dollar blocks in four U.S. cities. 2007
"Scenario Planning Workshop," strategies for justice reinvestment in Brownsville, Brooklyn. 2007
Open Society Foundation, Graphical Innovations in Justice Mapping, New Orleans, 2006-2009
"*Justice Reinvestment, New Orleans*"neighborhood plan and resulting pilot projects for justice reinvestment in Central City, New Orleans. 2009
Rockefeller Foundation, Guggenheim Museum, Stillspotting Seminar, 2010
Rockefeller Foundation, Making Data Public, 2011
Thompson Reuters Advanced Data Visualization Project, In Progress, 2012-2013
Close Up at a Distance: Mapping, Technology, Politics. Forthcoming, Zone Books, New York. 2013

Professional Memberships:
N/A

Name: Marc Kushner, AIA

Courses Taught
A4006 Advanced Architecture Studio VI, Under Over Out
A4006 Advanced Architecture Studio VI, Like Studio
A4006 Advanced Architecture Studio VI, Reconfiguring Liberty Island
A4006 Advanced Architecture Studio VI, Mobile Territories

Educational Credentials:
BA, University of Pennsylvania, 1999
M.Arch., Harvard University, 2004

Teaching Experience:
Visiting Assistant Professor, Columbia University, 2004-2009
Adjunct Assistant Professor, Columbia University, 2010-present

Professional Experience:
Associate, Lewis Tsurumaki Lewis, New York, 200-2006
Partner, HWKN (HollwichKushner), New York, 2007-present
CEO, Architizer, NYC, 2009-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
http://blog.archpaper.com/wordpress/archives/tag/hollwich-kushner
http://www.moma.org/interactives/exhibitions/yap/2012ny_hwkn.html
http://www.fastcodesign.com/1669673/meet-wendy-a-partyscape-that-cleans-the-air#1
http://www.archdaily.com/111253/boom-community/

Professional Memberships:
The American Institute of Architects

Name: Will Laufs, PhD, PE, LEED AP, IWE

Courses Taught:
AA4113 Architectural Technology III

Educational Credentials:
Cand.-Ing. Architecture, RWTH Aachen/Germany, 1993
Dipl.-Ing. Structural Engineering, RWTH Aachen/Germany, 1996
Dr.-Ing. (PhD) Structural Engineering, RWTH Aachen/Germany, 2000
International Welding Engineer (IWE), SLV Duisburg/Germany, 2000

Teaching Experience:
Assistant Professor, RWTH Aachen/Germany, 1996 – 2000
Assistant Professor, TU Kaiserlautern/Germany, 2001 - 2002
Assistant Professor, Pratt Institute, Integrated Building Design, 2008-present
Adjunct Assistant Professor, Columbia University, 2010-present

Professional Experience:
Executive Vice President, Werner Sobek New York, 2003-2007
Vice President/Principal, Thorntion Tomasetti New York, 2008-2010
Principal, Buro Happold New York, 2010-2012
Owner & Principal, Laufs Engineering Design LLC New York, 2012-present

Licenses/Registration:
New York - Structural Engineering License
Florida - Structural Engineering License

Selected Publications and Recent Research:
Sedlacek, G., Blank, K., Laufs, W., Güsgen, J.: Glas im Konstruktiven Ingenieurbau, book publication, (Verlag Ernst & Sohn, 1999)
Laufs, W., Sedlacek, G.: Stress distribution in thermally tempered glass panes near *the edges, corners and holes, (Glass, Science and Technology, 01 and 02/ 1999)*
Laufs, W.: Visions Engineered – Freeform meets Form-finding; (Smart Geometry Conference, Barcelona; 2010)
Laufs, W.: Interview in Architectural Record Magazine, Article "Shattering Myths about Glass", (May 2010)
Laufs, W., Vilkner, G.: Transparent Glazing for Free-form Building Skin - Parametric Modeling meets curved Glazing Engineering; (AEC Conference PennState Uni, Pennsylvania; June 2010)
Laufs, W.: What if … we allowed nature to design our buildings. (website publication www.burohappold.com, Oct. 2011)
Laufs, W., Verboon, E.: Chapter in book publication 'New Developments in Façade Design'; (Penn State University, 2012, in publishing)

Professional Memberships:
Member of Specialty Structures Group, ASCE North America
Member of Tensioned Fabric Structures Group, ASCE North America
Member of SEAoNY, Structural Engineering Association of New York
Member of IABSE, Switzerland

Name: Thomas Leeser, Dipl. Ing., Architect

Courses Taught:
A4005 Advanced Architecture Studio V
A4853 Advanced Architecture Studio

Educational Credentials:
Undergraduate Program in Industrial Design and Visual Communication, Hannover, Germany, 1974-75
B.Arch., (Vordiplom), ,Technische Hochschule Darmstadt, Darmstadt, Germany, 1979
Thesis Foreign Exchange Program, The Cooper Union, 1980-81
M.Arch (Dipl. Ing.)., Technische Hochschule Darmstadt, Darmstadt, Germany, 1985

Teaching Experience:
Assistant Professor, Princeton University, 1989-1996
Visiting Associate Professor, Illinois Institute of Technology, 1996
Adjunct Assistant Professor, Columbia University, 1997
Adjunct Assistant Professor, Parsons School of Design, 1998-2000
Adjunct Assistant Professor, Rensselaer Polytechnic Institute, 1998-2002
Adjunct Assistant Professor, Pratt Institute, 2003
Adjunct Associate Professor, The Cooper Union, 2006
Adjunct Assistant Professor, Columbia University, 2005-Present
Adjunct Assistant Professor, Harvard University, 2012-Present

Professional Experience:
Partner in Charge of Design, Eisenman Architects, New York, 1980-89
Principal, Leeser Architecture, New York, 1989-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
The Architecture of Navigation, RMIT Press, 2002
Open Source Architecture: Building Eyebeam, Eyebeam Atelier, 2001
10 x 10, Phaidon Press, 2000
Choral Works: A Collaboration between Peter Eisenman and Jacques Derrida, ed. J. Kipnis and Thomas
Leeser, Monacelli Press, 1997
Estonian National Museum Competition Catalog, Estonian National Museum, 2006

Professional Memberships:
N/A

Name: Jennifer W. Leung

Courses Taught:
A4324 Architectural Drawing & Representation II

Educational Credentials:
B.S. Biochemistry, University of California at Los Angeles,
M.Arch., Princeton University, 2006

Teaching Experience:
Lecturer, University of Pennsylvania, 2006-2007
Critic, Yale University, 2007-Present
Adjunct Assistant Professor, Columbia University, 2010-Present

Professional Experience:
Architecture & Urban Studies Fellow, Whitney Museum of American Art, 2006-2007

Licenses/Registration:
N/A

Selected Publications and Recent Research:
The Strategic City. Jennifer Leung (MONU: 2010)
Growing Profit on the War on Error. Jennifer Leung (Bracket: 2010)
Maurizio Cattelan. Jennifer Leung (ArtUS: 2010)

Professional Memberships:
N/A

Name: Frederic Levrat

Courses Taught:
ARCH 4003 Core Studio III – Housing
ARCH 4005 Advanced Studio V – Knowledge City
ARCH 4006 Advanced Studio VI – Knowledge City – Shanghai - Beijing
ARCH 4006 Advanced Studio VI – Deployable Architecture

Educational Credentials:
Dipl.Arch., Federal Institute of Technology Lausanne – 1990

Teaching Experience:
Invited Professor, Osaka Sangyo, Graduate School of Architecture, 2009
Tutor, TASMENA, International Workshop, Dubai, UAE, 2010
Tutor, Milan Polytechnic, International Workshop, Thinking the Edge, 2010
EPF-Lausanne International Workshop, Desperate Houses, 2010
Adjunct Assistant Professor, Columbia University, 1994- Present
Visiting Associate Professor, Pratt Institute, 1994- present
Founder and Director of Mindscape Lab, Columbia University GSAPP, 2011-present
Founder, Vico Morcote International Summer Workshop, Switzerland 2011-present

Professional Experience:
Intern, Tadao Ando & Associates, Osaka, Japan, 1988
Project Architect Luscher Architects, Lausanne, Switzerland 1990-91
Project Architect, Eisenman Architects, New York, 1991-94
Founder and Principal of ArX Geneve, 1997-02
Founder and Principal of ArX Kabul, 2004-07
Founder and Principal of ArX (Levrat Design) New York, 1994-present

Licenses/Registration:
Geneva – Switzerland and Europe since 1990

Selected Publications and Recent Research:
M Emory Games, Harvard Press/Rizzoli, Cambridge, 1996
Building Between, Architecture Gallerie, Munich, 1998
Bibliothèque du future OCDE Paris, 1998
Architecture as Interface - The State of Architecture at the Beginning of the XXI Century Princeton Press, 2004
Island & Ghettos. Heidelberg Kunstverein, Germany, 2008

Professional Memberships:
N/A

Name: Kevin P. Lichten, AIA

Courses Taught :
A4114 Architectural Technology IV
A4115 Architectural Technology V

Educational Credentials:
B.A., Brown University, 1974
M. Arch., Yale University, 1977

Teaching Experience:
Adjunct Assistant Professor of Architecture, Columbia University, ????-Present
Professional Experience:
Architectural Designer, Shepheard, Epstein and Hunter Architects, London, 1978
Architect, Edward Larrabee Barnes Architect, New York, 1978-1981
Senior Associate, Fox & Fowle Architects, New York, 1981-1991
Partner, Kevin Lichten Architects, New York, 1991-1996
Principal, Lichten Craig Architects LLP, New York, 1996-Present

Licenses/Registration:
New York
Connecticut

Selected Publications and Recent Research:
N/A

Professional Memberships:
The American Institute of Architects

Name: Giuseppe Lignano, International AIA Associate

Courses Taught:
ARCH A4003 Core Studio III – Housing
ARCH 4006 Advanced Studio VI

Educational Credentials:
M.Arch. Universita' Federico II, Naples, Italy, 1989
Visiting Scholar., Columbia University, 1990-1991

Teaching Experience:
Adjunct Professor, Parsons Graduate School of Architecture, New York, 2001-2005
Visiting Professor, Syracuse University Graduate School of Architecture, Fall 2005
Visiting Professor, MIT, Cambridge, Spring 2012
Adjunct Assistant Professor Columbia University, 2004-present

Professional Experience:
Principal and Founder, LOT-EK, New York and Naples, Italy, 1993-present

Licenses/Registration:
Italy

Selected Publications and Recent Research:
URBANSCAN, (Princeton Architectural Press, 2002)
MDU, (DAP, 2003)

Professional Memberships:
The American Institute of Architects, International Associate

Name: Chang Liu

Courses Taught
A4461 Traditional Chinese Architecture

Educational Credentials:
B.A., Tsinghua University, Beijing, 1997
M.A., Tsinghua University, Beijing, 2000
Ph.D., Tsinghua University, Beijing, 2002

Teaching Experience:
Lecturer, School of Architecture, Tsinghua University 2002-2007
Associate Professor, School of Architecture, Tsinghua University, 2007-present

Professional Experience:
Architectural Conservator, Palace Museum, Beijing, China 1992-1998

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Studies on Proportion and Dimension of Ancient Wood Structures in China [with Wang & Duan] (China Press of Building Industry, 2011)
The Emperor's Private Paradise: Treasures from the Forbidden City [with Berliner] (Yale University Press, 2010)

Professional Memberships:
N/A

Name: Robert Luntz

Courses Taught :
A4114 Architectural Technology IV
A4115 Architectural Technology V

Educational Credentials:
B.D. Arch., University of Florida, 1984
M. Arch., Columbia University, 1986

Teaching Experience:
Guest Critic, Yale University
Guest Critic, Columbia University
Guest Critic, New Jersey Institute of Technology
Guest Critic, Pratt Institute
Guest Critic, University of Miami
Guest Critic, City College of New York
Guest Critic, Boston Society of Architects
Adjunct Assistant Professor of Architecture, Florida International University, 1996-1997
Adjunct Assistant Professor of Architecture, Columbia University, 2004-Present

Professional Experience:
Beyer Blinder Belle Architects, 1985-1986
Perkins & Will Architects, 1986-1989
Gwathmey, Siegel and Associates, 1989-1990
Founding Partner, Resolution : 4 Architecture, 1990-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Radhi Majmudar

Courses Taught:
Roving Engineers Program

Educational Credentials:
B.A. Economics, Columbia University, 1990
B.S.M.S. Civil Engineering, Columbia University, 1991
M.B.A., London Business School, 2005
E.M.B.A., Columbia University, 2006

Teaching Experience:
Adjunct Assistant Professor, Pratt Institute, 2005-Present
Adjunct Assistant Professor, The City University of New York, 2005-Present
Adjunct Assistant Professor, Columbia University, 2005-Present

Professional Experience:
Structural Engineer, Digital Structures, 1991-1993
Structural Engineer, Parsons Corp, 1993-1995
Structural Engineer, Han Padron Associates, 1995-1997
Regional Structural Engineer Manager, Hazen and Sawyer, 2001-2004
Principal and Vice President, Dewhurst Macfarlane and Partners, 2005-2009
Business Principal Partner, PENCIL, 2007-Present
Executive Consultant, Accounts Receivable Advisor, Transworld Systems, 2009-Present
Founder and Principal, Innovative Structural and Specialty Engineering, 2009-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
The American Institute of Engineers, Westchester Hudson Valley Chapter
American Society of Civil Engineers, Board Member 1987-2009

Name: Geoff Manaugh

Courses Taught:
A4006 Advanced Architecture Studio VI
A4004 Advanced Architecture Studio IV - The City of Mobile Services

Educational Credentials:
B.A. with Highest Honors, UNC-Chapel Hill, 1997
M.A., University of Chicago, 2001

Teaching Experience:
Adjunct Assistant Professor, Columbia University,
Visiting Critic, University of Southern California School of Architecture,
Visiting Associate Professor, Pratt Institute,
Instructor, *Landscapes of Quarantine* independent design studio, Storefront for Art and Architecture, New York
Instructor, *Urban Islands*, University of Technology, Sydney

Professional Experience:
Senior Editor, *Dwell* magazine: 2007-2009
Contributing Editor, *Wired* UK: 2009-present
Co-Director, Studio X-NYC, Columbia University, 2011-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"The Game," Essay for Paul Domela, editor, *Liverpool Biennial 2008: Made Up*, Liverpool University Press (2008)
"Take a Seat," Essay for Ai Weiwei, *Four Movements*, Phillips de Pury & Company (2009)
The BLDGBLOG Book, Chronicle Books (2009)
"Synthetic Geology," Essay for Philip Beesley, *Hylozoic Ground: Liminal Responsive Architecture*, Riverside Architectural Press (2010)
"The Squirrels," Short Story for Julien De Smedt Architects, *Agenda*, Actar (2010)
"Utopia by Template," Essay for Lukas Feireiss, editor, *Utopia Everywhere*, Gestalten (2011)
Landscape Futures: Instruments, Devices and Architectural Inventions (Editor), Actar/ Nevada Museum of Art (Forthcoming, 2012)
Burglar's Guide to the City, Farrar, Straus & Giroux (Forthcoming, 2013)
Thrilling Wonder Stories: Speculative Futures for an Alternate Present (editor with Liam Young), Architectural Association (Forthcoming, 2013)

Professional Memberships:
N/A

Name: Scott Marble, AIA

Courses Taught:
A4004 Advanced Architecture Studio IV – Columbia Building Intelligence Project
A4783 Workflow: Designing Industry

Educational Credentials:
B.E.D., Texas A&M University, 1983
M.Arch., Columbia University, 1986

Teaching Experience:
Visiting Critic, University of Houston, 200?
Charles & Ray Eames Visiting Professor, University of Michigan, 2004
Adjunct Assistant Professor, Columbia University, 1987-present

Professional Experience:
Founding Partner, Marble Fairbanks, New York, NY 1992-present

Licenses/Registration:
New York
New Jersey

Selected Publications and Recent Research:
Columbia Building Intelligence Project, Columbia University GSAPP, 2009 - 2012
Home Delivery, Fabricating the Modern Dwelling, Museum of Modern Art, 200?
Digital Workflows in Architecture; Design, Assembly, Industry; Birkhauser, Fall 2012

Professional Memberships:
The American Institute of Architects

Name: Robert Marino, PE, RA

Courses Taught :
A4002 Core Architecture Studio II
A4003 Core Architecture Studio III
A4004 Advanced Architecture Studio IV

Educational Credentials:
B Engineering, Stevens Inst. Of Technology, 1971
M Arch., Princeton University, 1982

Teaching Experience:
Design Critic, Harvard University, 2004-2009
Adjunct Asst. Professor, University of Pennsylvania, 1991-1998
Visiting Design Critic, University of Arizona, 2002-2003
Distinguished Visiting Professor of Architecture, CCNY, 2011
Visiting Design Critic and Scholar, Technical University of Munich, 2012
Adjunct Associate Professor, Columbia University, 1985-2004, 2009-Present

Professional Experience:
Intern, Michael Graves Architect, 1982-1985
Founder and Principal, Robert Marino Architects 1985-Present

Licenses/Registration:
New York
New Jersey (Architecture, Engineering)
Illinois

Selected Publications and Recent Research:
R. Marino, Contemporary World Architects, "Robert Marino", Intro. Kenneth Frampton, fwd. Alvaro Malo, ed. Oscar Ojeda, (Rockport, Mass., Rockport Publishers, Winter/ Spring 2002)

Professional Memberships:
N/A

Name: Reinhold Martin

Courses Taught:
A4326 Architectural Visualization 1900-2000
A6770 The American University: Architecture and Enlightenment 1750-1950
A6779 Philosophies of the City
A8905 PhD Colloquium: History across Disciplines

Educational Credentials:
B. Arch/B. Bldg. Sci., Rensselaer Polytechnic Institute, 1987
Grad. Dipl., Architectural History and Theory, Architectural Association, 1991
PhD, Architecture, Princeton University, 1999

Teaching Experience:
Adjunct Assistant Professor, Rensselaer Polytechnic Institute, 1991-1993
Visiting Lecturer, Yale University, 1997
Adjunct Assistant Professor, Columbia University, 1997-2004
Associate Professor, Columbia University, 2004-present
Director, Temple Hoyne Buell Center for the Study of American Architecture, Columbia University
Director, Ph.D. Program, Architecture, Columbia University, present

Professional Experience:
Partner, Martin/Baxi Architects, 1993-2008

Licenses/Registration:
New York

Selected Publications
The Organizational Complex: Architecture, Media, and Corporate Space (MIT Press, 2003)
Multi-National City: Architectural Itineraries, with Kadambari Baxi, (Actar, 2007)
Utopia's Ghost: Architecture and Postmodernism, Again (University of Minnesota Press, 2010)
Foreclosed: Rehousing the American Dream, with Barry Bergdoll (Museum of Modern Art, 2012)

Professional Memberships
Society of Architectural Historians
American Studies Association
Architectural League of New York

Name: Juergen Mayer H.

Courses Taught:
A4006 Advanced Architecture Studio VI
A6853 Advanced Architecture Studio

Educational Credentials:
Diplom-Ing. Architektur, Stuttgart University, 1992
M.Arch., Princeton University, 1994

Teaching Experience:
Visiting Professor, Harvard University, Cambridge, 2001, 2003
Gehry Chair, Visiting Professor, Toronto University, 2009
Visiting Professor, Columbia University, 2004-2006
Adjunct Assistant Professor, Columbia University, 2011-present

Professional Experience:
Intern, Sam Anderson Architect, NYC, 1994
Project Architect, Prof. Josef Paul Kleihues, 1994-1996
Principal of J. MAYER H. Architects, Berlin, Germany

Licenses/Registration:
Berlin, Germany

Selected Publications and Recent Research:
J. MAYER H., Monograph, HatjeCantz Publisher, 2008
- arium, weather and architecture, HatjeCantz Publisher, 2010
Rapport, Raumstrukturen, Berlinische Galerie, Berlin, 2011
Wirrwarr, Juergen Mayer H., HatjeCantz Publisher, 2010

Professional Memberships:
Bund Deutscher Architeken, Berlin, Germany and Architektenkammer Berlin, Germany

Name: Mary McLeod

Courses Taught:
A4348 History of Architecture I: 1700-1850
A6190 Rule vs. Freedom
A4648 Beyond Beauty: the Sublime and the Picturesque
A4556 Urbanism and Utopia
A4374 Contemporary Theory and Criticism of Architecture 1960-Present

Educational Credentials:
B.A., Princeton University, 1972
M.Arch., Princeton University, 1975
M.A. Princeton University, 1976
Ph.D., Architecture, Princeton University, 1985

Teaching Experience:
Assistant Instructor, Princeton University, 1973-1975
Assistant Professor, University of Kentucky, 1977-78
Visiting Assistant Professor, University of Miami, 1983
Visiting Associate Professor, Harvard University, 1985-1986
Professor of Architecture, Columbia University, 1978-present

Professional Experience:
Draftsperson, Michael Graves, Architect, 1974
Draftsperson, I.M. Pei and Partners, 1975
Draftsperson, junior designer, Marcel Breuer and Partners, 1976
Revisions organizer, Institute for Architecture and Urban Studies, 1981-1988
Consulting editor, *Assemblage,* 1984-1987
Consulting editor, *ARC,* 2005-present
Consulting editor, *Massilia,* 2006-present
Editorial board, *Architectural History,* 2012-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Architecture Criticism Ideology, co-editor with Joan Ockman and Deborah Berke (Princeton, N.J.: Princeton Architectural Press, 1985).
Architecture Reproduction, co-editor with Joan Ockman and Deborah Berke; editor: Beatriz Colomina (New York: Princeton Architectural Press, 1988).
Charlotte Perriand: An Art of Living, editor, author of two essays and many short pieces (New York: Harry N. Abrams, 2003).

Professional Memberships:
Member, The Architectural League of New York (board member until July 2006)
Member, Society of Architectural Historians (board member previously)

Name: Adam Modesitt

Courses Taught:
A4731 Adaptive Formulations I
A4732 Adaptive Formulations II
A4004 Advanced Architecture Studio C-BIP (Technical Instructor)

Educational Credentials:
B.A., Wesleyan University, 2000
M. Arch., Harvard University, 2007

Teaching Experience:
Digital Media Instructor, Harvard University, 2006-2007
Visiting Scholar, Ecole Polytechnique Fédérale de Lausanne, Switzerland, 2008
Adjunct Assistant Professor, Columbia University, 2009-2012

Professional Experience:
Architectural Assistant, Urban D.A.T.A., Shanghai, China, 2002 - 2003
Architectural Assistant, Foster and Partners, London UK 2004
Architectural Assistant, Preston Scott Cohen, Inc., Cambridge MA, Summer 2007
Architectural Designer, SHoP Architects, New York NY, 2008-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
SHoP: Out of Practice, 2012
Shingles, Thresholds, Massachusetts Institute of Technology, 2008
StudioWorks, Harvard University GSD, 2004-2007

Professional Memberships:
N/A

Name: Joaquim Moreno

Courses Taught:
A4001 Core Architecture Studio I

Educational Credentials:
B.Arch., University of Porto,
M.Arch., Escuela Técnica Superior de Barcelona, 2002
Ph.D., Princeton University, 2011

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2009-Present

Professional Experience:
Editor, InSi(s)tu Journal.
Curator, Portuguese representation at the Venice biennial, 2008

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: John H. Morrison

Courses Taught
ARCH A4024 Architectural Drawing and Representation II

Educational Credentials:
B.A., Gallatin School of Individualized Study, New York University, 2000
M.Arch., Princeton University, 2009

Teaching Experience:
Teaching Assistant for David Turnbull, Columbia University, Fall 2005
Teaching Assistant for Jane Harrison, Columbia University, Spring 2006
Teaching Assistant for Jane Harrison, Columbia University, Summer 2006

Professional Experience:
Assistant, Storefront for Art and Architecture, New York , NY 2001-2002
Intern/Project Manager, Lewis.Tsurumaki.Lewis, New York , NY 2005-2006
Project Manager, Geiger Mason Design, New York, NY 2006-2008
Project Manager, Lewis.Tsurumaki.Lewis, New York , NY 2008-2011
Associate, Lewis.Tsurumaki.Lewis, New York, NY 2011-present

Licenses/Registration:
LEED, AP

Selected Publications and Recent Research:
Bernstein, Fred A. "Buildings Easy on the Earth, and the Eyes." *The New York Times.* 18 September 2009. Green House.
Clines, Francis X. "MoMA and the Coming Flood." *The New York Times.* 4 January 2010. MoMA Rising Currents.
Hodge, Brooke. "Seeing Things: Size Matters." *The New York Times.* 4 August 2011. LA Forum.
Hawthorne, Christopher. "Architecture Review: Administrative Campus Center at Claremont." *Los AngelesTimes.* 24 October 2011. Claremont University Consortium.
Bergdoll, Barry. *Rising Currents: Projects for New York's Waterfront.* New York: The Museum of Modern Art, 2011. MoMA Rising Currents.
Hawthorne, Christopher. "Screening Room." *Architectural Record* February 2012: 80-83. Claremont University Consortium.
Lau, Wanda. "Lighten Up."*Eco-Structure.* January-February 2012: 21-23. Claremont University Consortium

Professional Memberships:
N/A

Name: Junko Nakagawa

Courses Taught:
A4112 Environmental Systems/MEP

Educational Credentials:
B.Arch., Washington University in St. Louis, 1997
M.Arch, Massachusetts Institute of Technology, 2002

Teaching Experience:
Guest Lecturer, Harvard University Graduate School of Design, 2002
Guest Lecturer, Massachusetts Institute of Technology, 2008
Guest Lecturer, New Jersey Institute of Technology, 2009-2011

Professional Experience:
Architectural Designer, Renzo Piano Building Workshop, Paris, France, 2000-2001
Architect, Grimshaw Architects, New York, NY 2002-2007
Senior Environmental Designer, Atelier Ten, New York, NY 2007-Present

Licenses/Registration:
New York

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Federico Negro

Courses Taught:
A4812 Managing Complexity

Educational Credentials:
B.S. Architectural Studies, University of Illinois at Urbana-Champaign, 2002
M.Arch, Parsons the New School for Design, 2004

Teaching Experience:
Adjunct Assistant Professor, Yale University, 2006
Adjunct Assistant Professor, Columbia University, 2012

Professional Experience:
Project Manager, SHoP Architects, 2004-2008
Founding Partner, CASE, 2008-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Anton M. Nelson, P.E.

Courses Taught :
Roving Engineers Program

Educational Credentials:
B.S., Univeristy of Illinois at Urbana-Champaign, 1999
M.S., The City University, London, 2000

Teaching Experience:
Guest Critic, City College of New York, 2008
Guest Lecturer, City College of New York, 2009
Adjunct Assistant Professor, Columbia University, 2011 - 2012

Professional Experience:
Designer, SYSTRA Consulting Inc., Bllomfield, NJ, 2000-2005
Senior Associate, Dewhurst Macfarlane and Partners, PC, New York, 2005-Present

Licenses/Registration:
New Jersey
New York
Colorado
California
Massachusetts

Selected Publications and Recent Research:
“Framework Methodology and Statement of Need for the Design of Critical Facilities for Clustered Seismic Events” Abstract accepted for the 15th World Conference on Earthquake Engineering, Lisbon, Portugal
“A New Approach to Office Construction: The Deacero Headquarters, Monterrey, Mexico”, 2011 ASCE/SEI Structures Congress, Las Vegas, NV.
“The Preliminary Design of the Gerard L. Cafesjian Center for the Arts, Yerevan, Armenia”, The Third International FIB Congress and Exhibition, Washington, DC, May 30 – June 3, 2010.

Professional Memberships:
American Concrete Institute

Name: Davidson Norris

Courses Taught:
A4684 Sustainable Design
A4635 Architectural Daylighting
A6170 Architecture and the Sustainable Built Environment

Educational Credentials:
B.A., Williams College, 1970
M.Arch., Yale University, 1977

Teaching Experience:
Adjunct Professor, Parsons School of Design,1998 - 2001
Adjunct Associate Professor, Columbia University, 2002 – 2012

Professional Experience:
Designer, Energy task Force, NYC, 1978 –1982
Designer, Total Environmental Action, Harrisville, NH, 1982 – 1986
Project Architect, Charles Boxenbaum Architect, NYC, 1986 – 1990
Principal, Davidson Norris Architect, NYC, 1990 – present
Principal, Carpenter Norris Consulting, 1996 - present

Licenses/Registration:
New York

Selected Publications and Recent Research:
N/A

Professional Memberships:
IESNA
North American Sundial Society

Name: Kate Orff, RLA, ASLA

Courses Taught :
A4623 Sustainable Futures Seminar (joint forum with Earth Institute)
A4623 Landscape, Infrastructure, Intervention Seminar
A4853 Advanced Architecture Design Studio
A6851 Advanced Urban Design Studio

Educational Credentials:
M.L.Arch., Harvard University, 1997
B.A., University of Virginia, 1993

Teaching Experience:
Adjunct Assistant Professor, Columbia University 2002-2005
Assistant Professor, Columbia University, 2005-present

Professional Experience:
Designer, Hargreaves Associates, San Francisco CA
Designer, OMA/AMO Rotterdam NL and New York
NYPartner, SCAPE / LANDSCAPE ARCHITECTURE PLLC, New York NY

Licenses/Registration:
New York New
Jersey
Connecticut
South Carolina
Certified Landscape Architect

Selected Publications and Recent Research:
Petrochemical America. New York: Aperture Foundation, 2012. Essays and drawings by Kate Orff and photographs by Richard Misrach.
Gateway: Visions for an Urban National Park, eds. Kate Orff, Alexander Brash, Jamie Hand. New York: Princeton Architectural Press, 2011. With essay “Cosmopolitan Ecologies” by K. Orff.
Envisioning Gateway. New York: Urban Landscape Lab, Spatial Information Design Lab, 2007. Design research report, authored by K. Orff and S. Williams and distributed in collaboration with the National Parks Conservation Association (NPCA) and Van Alen Institute (VAI).
Bird Safe Building Design Guidelines. New York: Urban Landscape Lab, 2006. Project directed by K. Orff and authored and distributed in collaboration with New York City Audubon Society. (Winner, National ASLA Award, Communications) URL: http://www.nycaudubon.org/home/BirdSafeBuildingGuidelines.pdf

Professional Memberships:
American Society of Landscape Architects

Name: Robert K. Otani, P.E., LEED AP

Courses Taught :
Roving Engineers Program

Educational Credentials:
B.S. Civil Engineering, Rutgers University, 1990
M.S. Civil Engineering, Penn State University, 1995

Teaching Experience:
Adjunct Instructor, New York University, 2008-2009
Adjunct Assistant Professor, Pratt Institute, 2007-2011
Adjunct Assistant Professor, Columbia University, 2009-2011

Professional Experience:
Vice President, Thornton Tomasetti, 1995-Present

Licenses/Registration:
New York
New Brunswick
Nova Scotia
Alberta

Selected Publications and Recent Research:
“Concrete Construction at 7 World Trade Center: The Automatic Climbing System,” STRUCTUREmag, January 2009

Professional Memberships:
Structural Engineers Association of New York, Codes and Standards Committee Chair, 2009-Present
Structural Engineers Association of New York, President, 2007-2008
New York City Model Code Program, Technical Member, 2004-2007, 2011-2012

Name: Philip Parker

Courses Taught:
A4001 Core Architecture Studio I

Educational Credentials:
B.D. Arch., University of Florida, 1977
M.Arch., Yale University, 1984

Teaching Experience:
Assistant Professor, University of Cincinnati, 1985-88
Visiting Professor, The Ohio State University, 1991
Assistant Professor, Rhode Island School of Design, 1988-94
Adjunct Assistant Professor, Barnard College, Columbia University, 1996
Lecturer, Princeton University, 2004
Adjunct Associate Professor, Pratt Institute, 1994-present
Adjunct Assistant Professor, Columbia University, 1996 - present

Professional Experience:
Designer, Faulkner, Fryer and Vanderpool Architects, 1978-79
Designer, Perkins and Will Architects, 1979
Designer, Wes Goforth, Architect, 1981-83
Senior Designer, Gruen Associates, New York, 1982
Designer, Rothzeid, Kaiserman, Thomson and Bee Architects, 1984-85
Principal, Philip Parker Architects, New York, 1994-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
Habitat, NEW YORK TIMES, 2003
Hinges :: Hinging Young American Educators in Architecture, SPACE JOURNAL, 1994
DIFFERENTES NATURES, Liliana Albertazzi, 1993
The Atlanta Garden Project, ART FOR WORK, Marjory Jacobson (Thames and Hudson, 1993)
Crossings: Golf Course x Steel Works, PRATT JOURNAL OF ARCHITECTURE, 1992
ARCHITECTS + ARTIFACTS, Paul Rosenblatt, 1991
Theory in House, Practice in Offices, ARCHITECTURE, Michael Crosby, 1986
YALE MASQUE; Studio projects with John Hejduk, Editor and Designer, 1983
Urban Solar Dwelling, AIA JOURNAL, 1976
Louver / Lens, 20 West Street, 2008
Incision: Action Cut – Micro Cut, 2007
Ground Glass / School Walls, 1996

Professional Memberships:
N/A

Name: Amanda Parkes

Courses Taught:
A4794 Body Craft: Form Function and New Material
A4787 Beyond the Outlet

Educational Credentials:
B.S.E., Product Design, Stanford University, 1996
B.A. Art History, Stanford University, 1996
Ph.D. Tangible Media, Massachusetts Institute of Technology, Media Lab, 2009

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2010-Present

Professional Experience:
CTO, Bodega Algae, 2008 - Present
Founder, Skinteractive Studio, 2010 - Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Raj Patel

Courses Taught:
A4628 Acoustics

Educational Credentials:
B.Eng., Engineering Acoustics and Vibration. University of Southampton, 1993

Teaching Experience:
Adjunct Assistant Professor, Columbia University, XXXX-Present

Professional Experience:
Principal, ARUP, 1993 - Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
Institute of Acoustics (UK)
National Council of Acoustic Consultants (USA)
Institute of Noise Control Engineers (USA)

Name: Richard A. Plunz

Courses Taught:
A4005 Advanced Architecture Studio V (Joint w/ UD)
A6837 Fabrics and Typologies: NY/Global
A6851 Urban Design Studio III

Educational Credentials:
B.S. Architectural Engineering, Rensselaer Polytechnic Institute, 1965
B.A. Architecture, Rensselaer Polytechnic Institute, 1966
M.A. Urban Design and History, Rensselaer Polytechnic Institute, 1967

Teaching Experience:
Assistant Professor of Architecture, Pennsylvania State University, 1968-1973
Chairman, Division of Architecture, Columbia University, 1977-1980
Adjunct Associate Professor of Architecture, Rensselaer Polytechnic Institute, 1981-182
Visiting Professor of Architecture, Politecnico di Torino, 1982
Visiting Professor of Architecture, Katholieke Universiteit Leuven, 1983,1989
Invited Participant, International Training Workshop, United Nation Center for Human Settlements, 1990, 1992
Invited Participant, "Architectural heritage Today" workshops, Research Center for Islamic Art and Architecture, 1994,1995
Professor of Architecture, Columbia University, 1973-Present
Director, Urban Design Program, Columbia University, 1991-Present

Professional Experience:
N/A

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Published extensively. Titles include, A History of Housing in New York City. Dwelling type and Social Change in the American Metropolis. New York: Columbia University Press, 1990. *Apartments.* The Encyclopedia of New York City. (K. Jackson, ed.) New Haven: Yale University Press, 1995. pp. 39-40. *Beyond Dystopia. Beyond Theory Formation.* Mortal City. (Peter Lang, ed.) New York: Princeton Architectural Press, 1995. pp28-35.

Professional Memberships:
N/A

Name: Jennifer Preston, LEED AP BD+C

Courses Taught:
A4002 Core Archiecture Studio II
A4003 Core Architecture Studio III
A4005 Advanced Architecture Studio V

Educational Credentials:
B.E.D., University of Colorado at Boulder, 2000
M.Arch., Columbia University, 2008

Teaching Experience:
Teaching Assistant, Columbia University, 2006-2008
Adjunct Assistant Professor, Columbia University, 2008-Present

Professional Experience:
Design Architect, Brooks and Falotico, 2001-2005
High Performance Design R+D, Kinetix [Business Ecology], 2008-2009
Sustainable Design Director, BKSK Architects, 2009-Present

Licenses/Registration:
Currently Testing for New York

Selected Publications and Recent Research:
N/A

Professional Memberships:
United States Green Building Council
Urban Green Council Living
Building Institute Sustainable
Design Leaders

Name: Jennifer Preston, LEED AP BD+C

Courses Taught (Four semesters prior to current visit in Spring 2013):
ARC 4102 Design Studio II – Core 2 (2009-2013)
ARC 4103 Design Studio III – Core 3 Housing (2010-2011)
ARC 4105 Design Studio V – Advanced 5 (2011-2012)

Educational Credentials:
B.ENVD., University of Colorado at Boulder, 2000
M.ARCH., Columbia University, 2008

Teaching Experience:
Teaching Assistant, NY-Paris, Columbia University, 2006-2008
Assistant Adjunct Professor, Columbia University, 2008-2013

Professional Experience:
Design Architect, Brooks and Falotico, 2001-2005
High Performance Design R+D, Kinetix [Business Ecology], 2008-2009
Sustainable Design Director, BKSK Architects, 2009-present

Licenses/Registration:
Currently Testing for New York

Selected Publications and Recent Research:

Professional Memberships:
United States Green Building Council
Urban Green Council Living
Building Institute Sustainable
Design Leaders

Name: Nicholas Quennell, FASLA

Courses Taught:
A4480 Elements of Landscape Architecture

Educational Credentials:
Dipl. Arch., Architectural Association, London, 1957
M.L.A., Harvard University, 1969

Teaching Experience:
Associate Professor, Columbia University, 1993-Present

Professional Experience:
Leonard Manasseh & Partners, Architects London, 1957-1960
London County Council Architecture Section, 1960-1961
Jose Luis Sert, 1961-1962
Lawrence Halprin & Partners, 1962 – 1965
Vollmer Associates, 1965-1968
Partner, Nicholas Quennell (Subsequently Quennell Rothschild & Partners), 1969-Present

Licenses/Registration:
(As Landscape Architect)
New York
New Jersey
Massachusetts
Connecticut
North Carolina

Selected Publications and Recent Research:
N/A

Professional Memberships:
The American Society of Landscape Architects

Name: Mark Rakatansky

Courses Taught:
A4001 Core Architecture Studio I
A4002 Core Architecture Studio II
A4853 Advanced Architectural Studio

Educational Credentials:
B.A., University of California at Santa Cruz, 1979
M. Arch., University of California at Santa Cruz, 1982

Teaching Experience:
Design Critic in Architecture, GSD, Harvard University, 1987-1989
Visiting Professor, University of Florida 1989
Visiting Professor, Northwestern University 1992
Adjunct Assistant Professor, University of Illinois, Chicago, 1989-1993
Associate Professor, Iowa State University (on leave 1999-2001), 1993-2001
Visiting Professor, University of California at Los Angeles 1999
Visiting Associate Professor, Pratt Institute, 1999-present
Adjunct Faculty, Parsons the New School for Design, 1999-present
Visiting Critic, Cornell University, 2009-present
Adjunct Associate Professor, Columbia University, 1999-present

Professional Experience:
Principal, Mark Rakatansky Studio, Brooklyn 1982-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Mark Rakatansky (as Series Editor, *Theoretical Perspectives in Architectural History and Criticism*, Yale University Press): Jennifer Bloomer, *Architecture and the Text* (1993)*;* Massimo Cacciari, *Architecture and Nihilism* (1993)*;* Peter Eisenman, *Eisenman Inside Out* (2004)*;* Catherine Ingraham, *Architecture and the Burdens of Linearity* (1998)
K. Michael Hays, Lauren Kogod, and Editors, "Twenty Projects at the Boundaries of the Architectural Discipline Examined in Relation to the Historical and Contemporary Debates over Autonomy," in *Perspecta 33: Mining Autonomy* (MIT Press, 2002)
Mark Rakatansky, "Envelope Please," in Bernard Tschumi and Irene Cheng, eds., *The State of Architecture at the Beginning of the 21st Century* (Monacelli Press, 2004)
Mark Rakatansky, "The Possibility of Another Culture" in *Space* (issue 473, 2007)
Mark Rakatansky, "Fabricators," in Phillip Anzalone, ed., *Full-Scale* (*GSAPP, 2012*)
Mark Rakatansky, *Tectonic Acts of Desire and Doubt (Architectural Association, 2012)*
Mark Rakatansky, "Mark Rakatansky," *Emerging Voices* (Princeton Architectural Press, 2013)

Professional Memberships:
N/A

Name: François Roche

Courses Taught:
A4005 Advanced Architecture Studio V

Educational Credentials:
M.A. Arch., École nationale supérieure d'architecture de Versailles, 1988

Teaching Experience:
Guest Professor, Bartlett Faculty of the Built Environment, London, 2000-2001
Guest Professor, Vienna University of Technology, 2001-2002
Professor, École nationale supérieure des beaux-arts, Paris, 1999-2003
Guest Professor, Escola Tècnica Superior d'Arquitectura, Barcelona, 2002-04
Guest Professor, Ecole Spéciale d'Architecture, Paris, 2005
Guest Professor, University of Pennsylvania, 2006
Guest Professor, University of Applied Arts Vienna, 2008
Guest Professor, University of Southern California, Los Angeles, 2009-2011
Adjunct Assistant Professor, Columbia University, 2006-Present

Professional Experience:
President, New-territories, 2003-Present
Co-founder and Principal, R&Sie(n), Paris, 1989-Present
Co-founder, [eIf/bʌt/c]# / Institute for contingent scenario, Bangkok, 2001-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Guest Editor. Log#25. *Reclaim resis(lience)stance*. Summer 2012
L'ombre du Caméléon, Trash Mimesis, 1994, Publisher IFA/Karedas (France)
Mutations @morphes, 1998, Publisher HYX (France)
Teen Years After, 2003, textes, Publisher Les Architectures Hérétiques (France)
Spoiled Climate, 2004, Publisher Birkhauser (Germany)
Corrupted Biotopes, 2004, Publisher Damdi (Korea)
« I've heard about », 2005, Publisher Paris Musée / MAM, Paris (France)
Fiction Scripts, 2006, Publisher Beijing Office / united Asia, (China)
Bio(reboot), 2009, Publisher PAP (Princeton Architectural Press) + Publisher 22
C3#300, Korean Review of Architecture / 2009 / on R&Sie(n)
"A building that never dies", Publisher Zumtobel / Released July 2009

Named Chevalier des Arts et des Lettres, 2001
Album de la Jeune Architecture prize, Paris, 1989

Professional Memberships:
N/A

Name: Michael Rock

Courses Taught:
A4716 Other Design: Graphic Presentation
A4726 Other Deisgn: Graphic Diagrams

Educational Credentials:
A.B., Union College, 1981
M.F.A., Rhode Island School of Design, 1984

Teaching Experience:
Assistant Professor, Rhode Island School of Design, 1984-1990
Senior Critic, Jan van Eyck Academy, Maastricht, 1992-98
Professor, Yale University School of Art, 1990–present
Director, Graphic Architecture Project, Columbia University, 2008-present

Professional Experience:
Partner, information Incorporated, Boston, 1984–1988
Parnter, 2x4 Inc., New York, 1992-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
It is What it Is (2x4,2010)
Multiple Signatures (Rizzoli, forthcoming 2013)

Professional Memberships:
American Academy in Rome, Fellow, 1999-2000
American Academy in Rome, Trustee, 2006-present
Smithsonian Insitution National Design Award, 2006

Name: Karla Maria S. Rothstein, R.A.

Courses Taught:
A4002 Core Architecture Studio II
A4003 Core Architecture Studio III
A4005 Advanced Architecture Studio V – Death Honor Urbanity: Infrastructures for Social Change

Educational Credentials:
B.Arch., University of Maryland, 1988
Certificate of Academic Exchange. Moscow Institute of Architecture, 1989
Certificate of Academic Exchange. Eidgenössische Technische Hochschule, 1991
M.Arch., Columbia University, 1992

Teaching Experience:
Adjunct Assistant Professor, Rensselaer Polytechnic Institute, 1993-1996
Adjunct Assistant Professor, Columbia and Barnard Colleges, 1998
Adjunct Assistant Professor, Columbia University, 1997-2008
Visiting Professor of Architecture, CEU San Pablo, Madrid SPAIN, 2008
Adjunct Associate Professor. Columbia University, 2008-present

Professional Experience:
Founding Member, Urban Agenda Collaborative, New York, 1991-1993
Founding Member, Tectonics. Architecture & Building Workshops, NYC, 1996-2002
Founding Partner, SR+T Architects, New York and Berlin, 1993-2009
Design Director and co-founder, Latent Productions, LLC New York, 1999-present

Licenses/Registration:
Germany

Selected Publications and Recent Research:
Process is the pollywog, Studio Works 11. Karla Rothstein, (Columbia Books of Architecture, 2003)
im Detail: Einfamiliehäuser / In Detail: Single Family Houses, Redaktion DETAIL and Birkhäuser Verlag. (in English and German, 2000. re-issued, 2006)
American Masterworks, Houses of the Twentieth and Twenty First Century, Kenneth Frampton and David Larkin, (Rizzoli, revised edition, 2008)
'Carbon Black,' essay in *'Ink'* or *'V is for Vermillion as described by Vitruvius, An A to Z of Ink in Architecture,'* (Forthcoming, 2012)
Our Changing Journey to the End: The New Realities and Controversies of Dying in America, Vol. I: Trends in How and Where We Die and Grieve, chapter: '*Rethinking Corpse Disposal Practices: Evolving Attitudes and Options.'* ABC-CLIO, Praeger Imprint. (Forthcoming, 2013)

Professional Memberships:
Columbia University Seminar on Death
Architectural Chamber in Berlin, Germany

Name: Lindy Roy

Courses Taught:
A4005 Advanced Studio V - Wild Mumbai
A4003 Core Studio III - Housing

Educational Credentials:
B.Arch Studies., University of Cape Town, 1984
M.Arch., Columbia University, 1990

Teaching Experience:
Assistant Professor, Tulane University, New Orleans, 1994-1995
Assistant Professor, Rice University, Houston, 1995-1998 Visiting Assistant Professor, IIT, Chicago, 1997-1998
Lecturer, Princeton University, Princeton, 2008-present
Visiting Lecturer, Harvard University, Cambridge 2011

Professional Experience:
Founding Principal, Roy Design, New York, 2000-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Joseph Rosa, *Figuration in Contemporary Design* (New Haven: Yale University Press 2008).
Harry Francis Mallgrave, Christina Contandriopoulos eds., *Architectural Theory: An Anthology from 1871 to 2005* (Oxford: Wiley-Blackwell 2008).
Kieran Long ed., *Hatch* (London: Lawrence King Publishing Ltd 2009).
Neil Spiller, *Digital Architecture Now: A Global Survey of Emerging Talent* (London: Thames & Hudson 2009).
Blaine Brownell, *Transmaterial 3: A Catalog of Materials that Redefine our Physical Environment* (New York: Princeton Architectural Press 2010)

Professional Memberships:
N/A

Name: Yehuda E. Safran.

Courses Taught:
A 4005 Advanced Studio V
A 4596 12 Dialogical and Poetic Strategies

Educational Credentials:
Graduate of Advanced Course in Sculpture, Saint Martin's School of Art, London, 1970
M.A., The Royal College of Art, London, 1972
Ph.D. Research, University College, London, 1972-1975

Teaching Experience:
Director in Theoretical Studies and Studio, Goldsmith's College, London, 1972-1986.
Director of Thesis in Theoretical Studies, Architectural Association, London, 1986-1993.
Visiting Professor, Rhode Island School of Design, 1996-1997.
Visiting Professor, Jan van Eyck Academy, Maastricht, 1993-1999.
Visiting Professor, Harvard University, 1986; 2009.
Visiting Professor. Nangi Graduate School of Architecture, 2002-2010.
Visiting Professor, Tongji University, Shanghai, China, 2010-2011.
Adjunct Associate Professor, Columbia University, 1996-Present

Professional Experience:
Stage Theater Designer, Tel- Aviv, 1966-1968.
Curator of 'The Architecture of Adolf Loos', Arts Council of Great Britain touring exhibition, 1985-86.
Curator of 'Fredrick Kiesler', Architectural Association, London, 1989.
Editor of 32 Beijing/New York, 2003-2007.
Editor of the magazine *Potlatch*, since 2009.
Consultant to Steven Holl Architects, 1996-Present
Director, Potlatch Art and Architecture Research Lab, 1997-Present.

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Peripheral vision & collective body : May 24th-September 21st 2008 (Museion, 2008).
Almost architecture / Srdjan Jovanović Weiss ; introductory essay by Yehuda Safran (Merz & Solitude ; Novi Sad, Serbia : kuda.nao, c2006).
OBRA : OBRA Architects (China Architecture & Building Press, 2005).
Steven Holl : written in water (Lars Müller Publishing, 2002).
Pedro Cabrita Reis : il silenzio in ascolto = giving heed to silence (Hopefulmonster, c2001).
*Mies van der Rohe (*Blau, *2000).*
José Paulo dos Santos : architecture (Rocha Artes Gráfricas, 199?).

Professional Memberships:
Trustee of the 9H Gallery, London.
Founding member of the Architecture Foundation, London.
Member of the College International de Philosophie, Paris.

Name: Jose I. Sanchez

Courses Taught:
A4524 Topological Study of Form
A4525 Simulation as the Origin of Tangible Form

Educational Credentials:
B.Arch., Pontificia Universidad Católica Madre y Maestra, Santiago, Dominican Republic, 1991
M.Arch., Pratt Institute, 1993
M.S.A.A.D., Columbia University, 1996
M.Arch., D.R.L., Architectural Association, London, 2010

Teaching Experience:
Lecturer, Yale University, 200-2003
Lecturer, School of Engineering and Applied Science, Columbia University, 1998-2006
Adjunct Assistant Professor of Architecture, Columbia University, 1998-Present
Course Tutor, Design Research Laboratory, Architectural Association, 2010-Present

Professional Experience:
Architectural Designer, Reiser+Umemoto Studio, New York, 1996-1999
Digital Consultant, Kolatan/Mac Donald Studio, 1999-2000
President, Contour Studios, Inc. Design/Visualization, 2000-2006
Biothing, 2009
Founder, Probotics, 2010

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Victoria Sanger, PhD

Courses Taught:
A6455, Vauban's Military Urbanism
A4332, European Urbanism and Cartography
A6455, Colonial Urbanism

Educational Credentials:
A.B., Harvard University, 19XX
M.A. Art History, Columbia Univerisity, 1993
M.Phil. Art History. Columbia University, 1994
Ph.D. Art History, Columbia University, 2000

Teaching Experience:
Visiting Professor, Université de Tours, 2001-2003
Lecturer, New York/Paris Program, Columbia University, 2005-2009
Adjunct Associate Professor, Cooper-Hewitt/Parsons MA Program, 2011
Associate Adjunct Professor, Columbia University, 2010-Present

Professional Experience:
N/A

Licenses/Registration:
N/A

Selected Publications and Recent Research:
With Isabelle Warmoes, *Vauban: Bâtisseur du Roi-Soleil,* exhibition catalogue, author and editor, Cité de l'architecture et du patrimoine, Somogy, 2007, 431 pages.
"Les Pierres de Vauban," in *Vauban: La Pierre et la Plume,* Editions Gerard Klopp et Éditions du Patrimoine, 76 pages, 2007.
“Vauban’s influence on the thirteen British colonies in the colonial and revolutionary period,” in the international study day, *Vauban's Influence Throughout the World,* July 7, 2011 Citadel of Arras. Publication forthcoming, manuscript available on request.
“L’influence française et la genèse de l’enseignement du génie militaire à l’Ecole de West Point,” in the conference, *Les saviors de l’ingénieur militaire: Manuels cours et cahiers d’exercices 1751-1914,* 22 October 2010, INHA, Paris, France. Publication forthcoming, manuscript available on request.
“The Impact of Real Estate Developers on Mid-Twentieth Century New York: the Case of the Uris Brothers,” in Special session “Postwar New York: Architects, developers, Patrons and Corporate Liberalism,” session chair, Joan Ockman. *Docomomo Eighth International conference,* New York, NY, September 2004, pp. 465-472.

Professional Memberships:
N/A

Name: Yoshiko Sato

Courses Taught:
A4001 Core Architecture Studio I
A4004 Advanced Architecture Studio IV

Educational Credentials:
B.Arch., The Cooper Union, 1989
M.Arch., Harvard University, 1996

Teaching Experience:
Assistant Professor, Foundation Department, Kansas City Art Institute, 1990-1992
Studio Critic, Parsons School of Design, 1996-1998
Visiting Critic in Design, Harvard University, 2004-2005
Adjunct Associate Professor, Columbia University, 1999-2012

Professional Experience:
Assistant Designer, Foundation Department, Kansas City Art Institute, 1990-1992
Principal, Morris Sato Studio, 1996-2012
Licenses/Registration:
N/A

Selected Publications and Recent Research:
Shin JiHye, "Morris Sato Studio, USA Profile" *bob Magazine, 024*, July 2006, pp.48-81.
O'Toole, Shane. "Architecture: Thinking out of the box"., *The Sunday Times Magazine*, Irish Edition, 13 March 2005.
Mori, Toshiko, et.al., ed. "Morris Sato Studio", *10x10_2*. Phaidon Press, 2005, March 2005, pp. 236-239, 414, 446-447.
Glueck, Grace. "New Museum Opens on a foundation of Modernism" New York Times: The Arts, 14 April 2005, p. 1,3.
Steinberg, Claudia. "Heavenly Bodies" *Interior Design Magazine*, October 2004, pp, 128-132, 251.
Watanabe, Takayuki. "Yoshiko Sato Profile". *Architecture Magazine* November 2002, pp. 60-63.
Wolfe, Lauren. "Humanizing Architecture". *Architecture Magazine*, May 2002, pp. 30-31.
Uenishi, Noburu. "Morris Sato Studio Profile". *Esquire Japan*, May 2002, p.64.
Ebihara, Yoshiko. "Aluminum by Design: Jewelry to Jets". *CONFORT Magazine*, August 2001, pp. 74-77.
Raul Cabra, et.al., ed. *American Contemporary Furniture*, 200. pp. 48-49.

Professional Memberships:
N/A

Name: Edwin Schlossberg, Ph.D.

Courses Taught
A4764 Communicating Complex Ideas in Public Settings

Educational Credentials:
B.A., Columbia University, 1967
M.S. and Literature, Columbia University, 1969
Ph.D., Columbia University, 1971

Teaching Experience:
Columbia University, New York NY
School of Visual Arts, New York, NY
New York City College of Technology, Brooklyn, NY
Smithsonian Institution, Washington, DC

Professional Experience:
Founder/ Principal Designer, ESI Design, 1971-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
The Pocket Calculator Game Book #2, Morrow, New York, NY, 1977, (co-author), translated into French and Japanese
The Home Computer Handbook, Bantam, New York, NY, 1978 (co-author)
Interactive Excellence: Defining and Developing New Standards, The Library of Contemporary Thought, The Ballantine Publishing Group, New York, NY, 1998

Professional Memberships:
Board of Directors for New York City Outward Bound
John F. Kennedy Library, *Member, Board of Directors; Chairperson, Museum and Exhibits Committee*
The U.S. Commission of Fine Arts, Washington, DC

Name: Veronika Schmid

Courses Taught:
A4005 Advanced Studio V – Istanbul Hippodrome
A6145 Saturated Models

Educational Credentials:
Dipl. Arch., Architectural Association, London, 1998
M.Arch II, University of California at Los Angeles, 2001

Teaching Experience:
Unit Tutor, Architectural Association London, 1998–2001
Design Tutor, Harvard GSD, 2001
Visiting Professor, University of Arlington, 2001
Visiting Professor, Technical University of Ljubljana, 2002
Unit Master, Architectural Association London, 2002–2007
Design Workshop, Technical University Graz, 2005
Seminar Series, University of Pennsylvania, 2005
Visiting Faculty, Harvard University, 2010
Visiting Faculty, Rhone Island School of Design, 2012
Adjunct Assistant Professor, Columbia University, 2007-present

Professional Experience:
Co-Founder, Impossible Productions Ink London , 2002
Architect, Francisdesign London, 2002 – 2005
Senior Architect, Arup AGU with Cecil Balmond, 2005 – 2007
Project Architect, Richard Meier and Partners, 2007 - 2010
Design, Project Management & Fabrication, Frank Stella New York, 2003 - present
Director, Impossible Productions Ink LLC New York, 2009- present
Director, ipi-Go New York, 2010 - present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Multiple Articles in SuperYACHT Design and other Yacht Magazines
Numerous Articles about the work with Frank Stella and contributions to Catalogues
Numerous Articles through Architectural Association Papers, Journals and Project Reviews
New forms of fabrication and applications within the fields of Architecture, Design and Art.

Professional Memberships:
N/A

Name: Felicity D. Scott

Courses Taught:
A4032 CCCP Colloquium I: Operating Platforms: Publications, Exhibitions, Research
A8905 PhD Seminar: "Histories and Modernities"
A4040 CCCP Thesis I
A4041 CCCP Thesis II
A4705 Architecture After 1945
A8904 PhD Seminar: "Methods"

Educational Credentials:
B.Arch., First Class Honors, Royal Melbourne Institute of Technology, 1991
M.A.U.D. with Distinction, Harvard University, 1994
M.A., Princeton University,1997
Ph.D., Princeton University, 2001

Teaching Experience:
Visiting Assistant Professor, Bard College and Bard Graduate Center, 2001-2002
Assistant Professor, University of California, Irvine, 2003-2006
Assistant Professor, Columbia University, 2006-2012
Associate Professor, Columbia University, 2012-present

Professional Experience:
Founding Editor, *Grey Room*, quarterly academic journal of architecture, art, media and politics published by MIT Press

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Architecture or Techno-utopia: Politics after Modernism (Cambridge: MIT Press, 2007)
Allegorical Time Warp: The Media Fallout of July 21, 1969 (*Living Archive 7: Ant Farm*, with *Ant Farm Timeline*) (Barcelona and New York: ACTAR Editorial, 2008)
"The Environmentality Game." In *ClimatS*, ed. Thierry Mandoul, 97-127 (Paris: Infolio Editions, 2012)
"Aspen Proving Grounds." In *The Aspen Complex*, ed. Martin Beck, 158-184 (Berlin: Sternberg Press, 2012)
"An Army of Soldiers or a Meadow: The Seagram Building and the 'Art of Modern Architecture.'" *Journal of the Society of Architectural Historians* 70, no. 3 (September 2011): 330-353
"No End(s) in Sight." In *Neo-avant Garde and Postmodern: Postwar Architecture in Britain and Beyond*, ed. Mark Crinson and Claire Zimmerman, 387-401 (New Haven: Yale Center for British Art and Yale University Press, 2010)
"Fluid Geographies: Politics and the Revolution by Design." In *New Views on R. Buckminster Fuller*, ed. Hsiao-Yun Chu and Roberto G. Trujillo, 160-175, 212-216 (Stanford: Stanford University Press, 2009)

Professional Memberships:
Society of Architectural Historians

Name: Laila Seewang, R.A.

Courses Taught:
A4002 Core Architecture Studio II

Educational Credentials:
B.S. Environmental Design, University of Tasmania, 1999
B.Arch., The Cooper Union, 2005
M.Arch., Princeton University, 2008

Teaching Experience:
Assistant Professor, The Cooper Union, 2009-2012
Visiting Critic, Monash University, 2011
Adjunct Assistant Professor, Columbia University, 2012-Present
Assistant Professor, Cornell University, 2012-Present

Professional Experience:
Architect, Diane Lewis Architect, 2005-2006
Architect, Pei Cobb Freed and Partners 2008-2011
Principal, Laila Seewang Architect, 2008 - Present

Licenses/Registration:
New York

Selected Publications and Recent Research:
The Trenton Bath House, with J. Reynolds, 2007
*Learning from Japan: Single Storey Urbanism, (*Lars Muller, 2009*).*
Brainstorming Ways to Turn Tappan Zee Into Park (Peter Appelbome, New York Times, 2012)

Professional Memberships:
N/A

Name: Paul Segal, FAIA

Courses Taught:
A4560 Professional Practice

Educational Credentials:
A.B., Princeton University, 1966
M.F.A. Architecture, Princeton University, 1969

Teaching Experience:
Adjunct Professor and Director of Practice, Columbia University, 1987-Present
Adjunct Professor, Pratt Institute, 2008- present

Professional Experience:
Designer, Skidmore, Owings and Merrill Architects, 1966-1967
Designer**,** Gruzen and Partners Architects, 1968
Designer, TAMS Engineers and Architects, 1969-1971
Founding and Senior Partner, Paul Segal Associates Architects LLP, New York and Seattle, 1971-2010
Independent Design Consultant, Paul Segal FAIA, 2010-Present

Licenses/Registrations:
New York
Connecticut
Massachusetts
New Jersey
Pennsylvania
Washington
Vermont
NCARB certified

Selected Publications and Recent Research:
By Paul Segal: *Professional Practice: A Guide to Turning Designs into Buildings*, (W.W.Norton, 2006)

Professional Memberships:
AIA College of Fellows – member, 1986-present
New York Foundation for Architecture (now the Center for Architecture) – President, 2002-2004
The American Institute of Architects, New York Chapter – President, 1985-1986
Mayor's Theater Advisory Council
Preservation League of New York State – Vice Chair, 1992-1996

Name: David Grahame Shane

Courses Taught:
A4688 Public Space & Recombinant Urbanism

Educational Credentials:
Dilp. Arch., Architectural Association, 1969
M.Arch., Cornell University, 1972
Ph.D., Cornell University, 1978

Teaching Experience:
Unit Master, Architectural Association, London, 1972-1976
Professor of Architecture, Bennington College, Vermont, 1976-1982
Visiting Associate Professor, Rice University, 1983
Visiting Professor, Urban Design, University of Pennsylvania, 1988-1997
Adjunct Professor of Architecture, Columbia University, 1985-Present
Adjunct Professor of Architecture, The Cooper Union, 1989-Present
Adjunct Professor of Architecture, City College, Graduate Urban Design Program, 2001-Present
Master Classes Ph.D. Urban Design Program, Venice University, 2001-Present Eterna
Examiner Graduate Urban Design Program, University College London, 2003- Present

Professional Experience:
Peterson-Littenberg, Architecture and Urban Design, New York, 1987-1989
Licenses/Registration:
NA

Selected Publications and Recent Research:
recombinant Urbanism; Conceptual Modeling in Architecture, Urban Design and City Theory, published by Wiley-Academy, 2005.
Architectural Design, Special Issue, “Sensing the 21st Century City; Upclose and Remote”, co-edited with Brian McGrath, published by Wiley-Academy, November 2005.

Professional Memberships:
Architectural Association, London
Architectural league, New York
American Institute of Architects, Non-professional member
Municiapl Arts Society, New York
Storefront for Art and Architecture

Name: Cassim Shepard

Courses Taught:
A4799 Montage City: Filmmaking as Urban Observation

Educational Credentials:
B.A., Harvard University, 2001
M.A., University of London, Kings College, 2004
M.C.P., Massachusetts Institute of Technology, 2007

Teaching Experience:
Visiting Lecturer, London School of Economics, 2007
Adjunct Assistant Professor, 2011-Present

Professional Experience:
Commissioned Video Artist, *Cities, Architecture and Society*, International exhibition of the Venice Architecture Biennale, Venice, Italy, 2006
Urban Planning and Designer, Pfeiffer Partners, New York, NY, 2008
Commissioned Video Artist, *Design with the Other 90%: CITIES*, Cooper-Hewitt National Design Museum, New York, NY, 2011
Editor, *Urban Omnibus*, The Architectural League of New York, New York, NY, 2008-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"The Field of Struggle, The Office and the Flat: Protest and Aspiration in a Mumbai Slum" in *Public Culture* (forthcoming winter 2012), co-authored with Michael McQuarrie and Naresh Fernandes
"Communicating the Culture of Citymaking" delivered at The Salzburg Congress for Urban Planning and Development, Salzburg, Austria, May 2012

Professional Memberships:
N/A

Name: Daniel Sherer, PhD

Courses Taught:
A4605 Italian Renaissance Architecture 1400-1600: *Regola* and *Invenzione*
A4330 Urban History I: Configurations of the City from Antiquity to the Enlightenment

Educational Credentials:
B.A., Yale College, 1985
Ph.D., Harvard University, 2000

Teaching Experience:
Visiting Lecturer in Architectural History, Harvard University, 2006
Adjunct Assistant Professor of Architectural History, Columbia University, 1996-present
Lecturer in Architectural History, Yale University, 2008-present

Professional Experience:
N/A

License/Registrations:
N/A

Selected Publications and Recent Research:
"The Historicity of the Modern," Log 24 (2012), 126-36.
Translation from the Italian and Introduction to Manfredo Tafuri, *Interpreting the Renaissance: Princes, Cities, Architects* (Yale 2006)

Professional Memberships:
Editorial Board, Orintorinco Publishing House, Turin, Italy
Editorial Committee for Conferences, Politecnico di Milano, Milan Italy

Name: Shohei Shigematsu

Courses Taught:
A4006 Advanced Studio VI

Educational Credentials:
B.S. Arch., Kyushu University, Fukuoka, Japan, 1996
M.Arch., Kyushu University, Fukuoka, Japan, 1997
Postgraduate Laboratory of Architecture, The Berlage Institute, 1998

Teaching Experience:
Visiting Faculty, Cornell University, NY, 2007-2009, 2012
Visiting Faculty, Harvard University, 2009
Adjunct Assistant Professor, Columbia University GSAPP, 2011-Present

Professional Experience:
Toyo Ito Architects & Associates, Tokyo, Japan, 1996
Matsuoka + Won Architects, Fukuoka, Japan, 1997
NKS Architects, Fukuoka, Japan, 1996-1997
Partner, Director of OMA New York, Office for Metropolitan Architecture, 1998-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Robert Silman, PE

Courses Taught:
A4645 Philosophy of Technology

Educational Credentials:
B.A., Cornell University, 1956
B. Civil Engineering, New York University, 1960
M. Civil Engineering, New York University, 1963

Teaching Experience:
Lecturer, Polytechnic Institute of New York, 1973
Fellow, Institute for Architecture and Urban Studies, 1973-1985
Visiting Professor, Yale University, 2001-2006
Adjunct Professor, City College of New York, 2007
Adjunct Assistant Professor, Columbia University, 1986-2000, 2012-preseent

Professional Experience:
Tishman Realty & Construction Company, 1957-1958
Severud Associates, 1960-1963
Ove Arup & Partners, London, 1963-1964
Ammann & Whitney, 1964-1965
Robert Silman Associates, Structural Engineers, 1966-present

Licenses/Registration (Professional Engineer):

New York	Vermont
New Jersey	New Hampshire
Pennsylvania	Maine
Connecticut	Maryland
Rhode Island	Virginia
Massachusetts	Kentucky
District of Columbia	

Selected Recent Publications:
Structural Engineering International, "Eminent Structural Engineer: Anton Tedesko (1903-1994)", May 2011, pp. 241-243.
Fallingwater. Rizzoli Books, April 2011. Chapter on Strengthening Fallingwater.
The Structural Engineer, "The Role of the Structural Engineer in Green Building" by John Anderson and Robert Silman, February 2009, pp. 28-31.
APT Bulletin, The Journal of Preservation Technology, Vol. XXXVIII, No. 4, 2007, "Is Preservation Technology Neutral?"

Professional Memberships:
The American Institute of Architects, Honorary Member
American Society of Civil Engineers, Fellow
Association for Preservation Technology, Member
International Assn. for Bridge and Structural Engineering, Working, Comm. 7, Past Chair
National Center for Preservation Technology and Training Board (NPS), Past Chair
Structural Engineers Association of New York, Honorary Member

Name: Roland Snooks

Courses Taught:
A4752 Swarm Intelligence

Educational Credentials:
B.App.Sci Environmental Design, University of Canberra, 1998
B.Arch., Royal Melbourne Institute of Technology, 2003
M.S.A.A.D., Columbia University, 2006

Teaching Experience:
Adjunct Assistant Professor, Pratt Institute, 2007-2008
George Isaacs Distinguished Fellow, USC, Los Angeles, 2009-2011
Adjunct Assistant Professor, Columbia University, 2006-present
Lecturer, University of Pennsylvania, 2008-present
Lecturer, Royal Melbourne Institute of Technology, Australia, 2012-present

Professional Experience:
Graduate Architect, Minifie Nixon, 2001-2004
Graduate Architect, Ashton Raggatt McDougall, 2004-2005
Design Architect, Reiser + Umemoto, 2006-2007
Design Director and Partner, Kokkugia, 2004-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Volatile Formation, (LOG 25, Ed Francois Roche, 2012).
Detail as Procedural Information (Architecture Australia, January/February 2012, vol 101, No 1.)
Behavioral Matter, (Pulsation in Architecture, J.Ross Publishing Inc, Florida. 2011)
*Observations on the Algorithmic Emergence of Character (*Models, 306090, Volume 11, Ed. Emily Abruzzo, Eric Ellingsen, Jonathan D.Solomon. New York, 306090 Inc, 2007)

Professional Memberships:
N/A

Name: Galia Solomonoff, AIA

Courses Taught:
A4182 Seminar: From the Ground Up: Building an Architectural Practice
A4001 Core Architecture Studio
A4005 Advanced Architecture Studio IV

Educational Credentials:
Architect, School of Architecture, National University of Rosario, Argentina, 1986
B.S. Arch., The City College, City University of New York, 1991
M.Arch., Columbia University, 1994

Teaching Experience:
Adjunct Professor, Rhode Island School of Design, 1995-1997
Adjunct Assistant Professor, Columbia University, 2000-2003
Mabel Marsh Visiting Professor Fall, Rensselaer Polytechnic Institute, 2001
Adjunct Professor, Princeton University, 2001-2003
Adjunct Professor, Cooper Union, 2002-2004
Louis Kahn Visiting Chair Professor of Architectural Design, Yale University, 2004
Assistant Professor, Columbia University, 2006-present

Professional Experience:
Designer, Rafael Viñoly Architects PC, New York, NY 1993
Designer, Pasanella + Klein, Stolzman + Berg, New York, NY1994-95
Designer, Bernard Tschumi Architects New York, NY1995-97
Architect, Office For Metropolitan Architecture Rotterdam, NL. 1998-99
Founding Architect, OpenOffice, New York, NY 2000-2003
Founder & Creative Director, Solomonoff Architecture Studio, NY, NY 2003-present

Licenses/Registration:
New York
Argentina

Selected Publications and Recent Research:
Public Housing: A New Conversation (New York: Temple Hoyne Buell Center for the Study of American Architecture, Columbia University GSAPP, 2009)
Layered Urbanisms, Gregg Pasquarelli / Galia Solomonoff / Mario Gooden (New York: W.W. Norton & Co., 2008)
Latin American Architecture: Six Voices (Studies in Architecture and Culture, No 5) K. Frampton, M. Quantrill, M. Waisman, D. Barco, G. Solomonoff, M. L. Tribe, P. J. Rodriguez (College Station: Texas A&M University Press, 2000)

Professional Memberships:
The American Institute of Architects
Sociedad Central de Arquitectos, Argentina
Colegio de Arquitectos de la Provincia de Santa Fe Distrito 2, Rosario, Argentina
Lower East Side Tenement Museum, AIA Board Member
Institute for Urban Design

Name: Morana M. Stipisic, Assoc. AIA, LEED AP

Courses Taught:
A6830 Infrastructure, Resilience & Public Space

Educational Credentials:
M.Arch., University of Zagreb, Croatia, 1999
M.S.A.U.D, Columbia University, 2005

Teaching Experience:
Design Studio Faculty, Chulalongkorn University, Bangkok, Thailand, 2007-2008
Research Advisor, Urban Design Lab, Columbia University, 2008-Present
Adjunct Assistant Professor, Columbia University, 2011-Present

Professional Experience:
Designer, Kohn Pedersen Fox, New York, 2006-2007
Urban Design Consultant for the Environment and Development Division, United Nations Economic and Social COmmission for Asia and the Pacific, Bangkok, Thailand, 2009-2011

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
The American Institute of Architects, Associate Member.

Name: John Szot

Courses Taught:
A4718 Cinematic Communication
A4817 Binary Space Partition
A4718 Faking It

Educational Credentials:
B.Arch., University of Texas at Austin, 1998
M.S.A.A.D., Columbia University, 2001

Teaching Experience:
Lecturer (Adjunct), University of Texas at Austin, 2001-2003
Adjunct Assistant Professor, Columbia University, 2003-present
Adjunct Associate Professor, Parsons School of Design, 2004-2006
Adjunct Associate Professor, Pratt Institute, 2003-2005, 2011-present

Professional Experience:
Junior Architect, Mitchell/Giurgola Architects, New York, NY 1998-2000
Project Architect, Christoff:Finio Architecture, New York, NY 2003-2004
Partner, Brooklyn Digital Foundry, New York, NY 1998-present
Principal, John Szot Studio, New York, NY 2006-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Benedetta Tagliabue

Courses Taught:
A4005 Advanced Architecture Studio V

Educational Credentials:
Architect, Istituto Universitario di Architettura di Venezia, 1989

Teaching Experience:
Visiting Lecturer, l'École Spéciale d'Architecture (ESA), Paris, 2007
Visiting Lecturer, Istituto Universitario di Architettura di Venezia, 2008
Adjunct Assistant Professor, Columbia University, 2011
Visiting Lecturer, Escuela Técnica Superior de Arquitectura de Barcelona, 2000-Present

Professional Experience:
Partner, Miralles Tagliabue EMBT, 1991-Present

Licenses/Registration:
Italy

Selected Publications and Recent Research:
2009 EL CROQUIS, N. 144. EMBT 2000 2009 ENRIC MIRALLES BENEDETTA TAGLIABUE After-life in progress.
2007 Benedetta Tagliabue "EATING THE CITY" Workshop Printemps 2007. ESA Productions (École Spéciale d'Architecture Paris).
2000 El Croquis N.100 101, Enric Miralles Benedetta Tagliabue 1996-2000
1999 GG. Miralles Tagliabue time architecture. Architecture Monograph, Editorial Gustavo Gili
EMBT Enric Miralles, Bernadetta Tagliabue, Work in Progress. Col-legi d'Arquitectes de Catalunya Publications. 2004.

Professional Memberships:
Col·legi d'Arquitectes de Catalunya (COAC)
Royal Incorporation of Architects in Scotland

Name: Mark Taylor

Courses Taught:
A4670 Design Build: Design Sequence

Educational Credentials:
B.A., University of Vermont, 1989
M.S.R.E.D., Columbia University, 2001

Teaching Experience:
Adjunct Assistant Professor, Columbia University, Spring 2012

Professional Experience:
Project Manager, SHoP Construction, New York, NY 2008-2009
Director of Operations, Columbia University. 2009-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Neil Thelen

Courses Taught :
A4005 Advanced Architecture Studio (Technical Consultant)
A4731 Adaptive Formulations I
A4732 Adaptive Formulations II

Educational Credentials:
B.F.A. Sculpture, The College of Visual Arts, 1998
Architecture Certificate, Ecole Des Americanes, Fontainbleau, France, 2003
M.Arch., University of Michigan, 2005

Teaching Experience:
Lecturer I in Architecture, University of Michigan, 2004-2007
Adjunct Assistant Professor of Architecture, Columbia University, 2010,2012

Professional Experience:
Designer, PEG Office of Landscape and Architecture, Philadelphia, PA, 2005-2006
Consulting Designer, Preston Scott Cohen Inc, Cambridge, Mass., 2006-2007
Digital Fabrication Laboratory Manager, University of Michigan, 2005-2007
Senior Project Consultant, Gehry Technologies, New York & UAE, 2007-2008
Digital Fabrication Specialist, Roxy Labs, Brooklyn, NY, 2010-2011
Facade Consultant, Director of Information Modeling, Front Inc., 2008-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Caterina Tiazzoldi

Courses Taught:
A4747 Milan Furniture Fair

Educational Credentials:
B.Arch., Politecnico di Torino, 1998
M.S.A.A.D., Columbia University, 2003
Ph.D., Department of Architecture and Industrial Design of Torino, 2006

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2005-Present

Professional Experience:
Principal, Nuova Ordentra, Torino, Italy, 2011-Present

Licenses/Registration:
Italy

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Ada Tolla, International AIA Associate

Courses Taught:
A4003 Core Architecture Studio III
A4006 Advanced Studio VI

Educational Credentials:
M.Arch. Universita' Federico II, Naples, Italy, 1989
Visiting Scholar, Columbia University, 1991

Teaching Experience:
Adjunct Professor, Parsons Graduate School of Architecture, New York, 2001-2005
Professor, Syracuse University Graduate School of Architecture, Syracuse, 2005
Visiting Professor, MIT, Cambridge, Spring 2012
Adjunct Assistant Professor, Columbia University, 2004-present

Professional Experience:
Principal and Founder, LOT-EK, New York and Naples, Italy, 1993-present

Licenses/Registration:
Italy

Selected Publications and Recent Research:
URBANSCAN, (Princeton Architectural Press, 2002)
MDU, (DAP, 2003)

Professional Memberships:
The American Institute of Architects, International Associate

Name: Paula Tomisaki

Courses Taught:
A4001 Core Architecture Studio I

Educational Credentials:
M.Arch., Morón University, Buenos Aires, Argentina, 2000
M.S.A.A.D., Columbia University, 2006

Teaching Experience:
Adjunct Assistant Professor, NYCCT, CUNY, 2011
Adjunct Assistant Professor of Architecture, Columbia University, 2011-present

Professional Experience:
Principal, Estudio Paula Tomisaki, Buenos Aires, Argentina, 2000-2004
Junior Architect, La Caja, Buenos Aires, Argentina, 2002-2004
Architectural Designer, Bernard Tschumi Architects, New York, 2006-2009
Principal, Archybrid, Buenos Aires/New York, 2010-present

Licenses/Registration:
Argentina

Selected Publications and Recent Research:
Skycrapers. Evolo limited edition book. By Carlo Aiello (editor) (2011)
Event Cities 4. Bernard Tschumi (MIT Press)
Skyscraper for the XXI Century. by Carlo Aiello (editor)
Distinguishing Digital Architecture: 6th Far Eastern International
Digital Architectural Design Award. By Yu-Tung Liu (editor)
Archiprix International Shanghai 2007. by Henk van der Veen (editor)
Collective Intelligence in Design (Architectural Design). by Christopher Hight (Editor), Chris Perry (Editor)

Afiliations:
New York Foundation for the Arts
The Architectural League NY

Name: Bernard Tschumi, FAIA, FRIBA, FAS

Courses Taught:
A4105 Advanced Architecture Studio V
A4618 Architecture as Concept (from 1968 to the present)
A4618 Architecture and the Contemporary (from 1968 to the present)

Educational Credentials:
M.Arch., Federal Institute of Technology (ETH), Zürich, Switzerland. 1969

Teaching Experience:
Lecturer and Unit Master, Architectural Association, London, 1970-75
Visiting Lecturer, Institute for Architecture and Urban Studies, New York, 1976
Visiting Lecturer, Princeton University, School of Architecture, 1976-77
Unit Master-at-Large, Architectural Association, London, 1976-79
Visiting Professor and Thesis Advisor, Princeton University, 1980-81
Visiting Professor, Cooper Union School of Architecture, New York, 1980-83
Davenport Visiting Professor, Yale University, 1988
Dean, Columbia University, 1988-2003
Professor, Columbia University,, 1988-present

Professional Experience:
Principal, Bernard Tschumi Architects, 1982-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
Architectural Concepts: Red is Not a Color. Rizzoli International Publications, New York, 2012.
Event-Cities 4: Concept-Form. Cambridge, MA and London: MIT Press, 2010.
The New Acropolis Museum. Rizzoli International Publications, New York, 2009
Bernard Tschumi: Conversations with Enrique Walker. New York: The Monacelli Press, 2006
Event-Cities 3. Cambridge, MA and London: MIT Press, 2004
Event Cities 2. Cambridge and London: The MIT Press, 2000
Architecture and Disjunction (Japanese Ed.) Kajima Institute / The MIT Press, 1996
Event-Cities (PRAXIS). Cambridge, MA and London, UK: The MIT Press, 1994
The Manhattan Transcripts: Theoretical Projects. New York and London: St. Martin's Press / Academy Editions, 1990
Cinegramme Folie: Le Parc de la Villette. Paris and New York: Champ Valion and Princeton Architectural Press, 1987

Professional Memberships:
Fellow, American Institute of Architects
International Fellow, Royal Institute of British Architects
Member of Fédération des Architectes Suisses

Name: Marc Tsurumaki, AIA, LEED AP

Courses Taught:
A4004 Advanced Architecture Studio IV
A4005 Advanced Architecture Studio V

Educational Credentials:
B.S. Arch., University of Virgina, 1987
M.Arch., Princeton University, 1991

Teaching Experience:
Adjunct Professor of Architecture, New Jersey Institute of Technology, 1994-1996
Adjunct Assistant Professor of Architecture, Columbia and Barnard Colleges, 1998-1999
Adjunct Professor of Architecture, Parsons School of Design, 1996-2004
Visiting Professor, Kent State University, 2005
Louis I. Khan Visiting Assistant Professor, Yale University, 2006
Visiting Professor, Massachusetts Institute of Technology, 2009
Visiting Professor, Syracuse University, 2009
Adjunct Assistant Professor of Architecture, Columbia University, 2004-Present

Professional Experience:
Project Architect, Joel Sanders Architect, New York, 1991-1997
Principal and Founding Partner, Lewis.Tsurumaki.Lewis, New York, 1992-Present
Licenses/Registration:
New York
NCAARB, Council Certification

Selected Publications and Recent Research:
Situation Normal...Pamphlet Architecture no.21, (New York: Princeton Architectural Press, 1998)
"Invernizzi's Exquisite Corpse: The Villa Girasole: An Architecture of Surrationalism," in Thomas Mical ed. Surrealism and Architecture (Rouledge 2004), 156-157
Lewis.Tsurumaki.Lewis: Opportunistic Architecture (New York: Princeton Architectural Press, 2007)

Professional Memberships:
American Association of Geographer
Association of Collegiate Society of Planners
The American Institute of Architects.

Name: Nicola Twilley

Courses Taught:
A4594 The Artificial Cryosphere
A4004 Advanced Architecture Studio IV - The City of Mobile Services

Educational Credentials:
B.A. First Class, University of Leeds, United Kingdom, 2000
M.A., University of Chicago, 2001

Teaching Experience:
Instructor, *Landscapes of Quarantine* Design Studio, Storefront for Art & Architecture, New York City, Fall 2009
Adjunct Associate Professor, Columbia University, 2011-present

Professional Experience:
Director of Public Programming, Benjamin Franklin Tercentenary, PA, 2004-2006
Director of Development, Wende Museum, Los Angeles, CA, 2006-2007
Director of Marketing and Communications, Summer Search, San Francisco, CA, 2007-2009
Food Editor, GOOD Inc., Los Angeles, CA, 2009-2010
Director, Studio-X NYC, New York City, NY, 2011-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
*Edible Geography (*ediblegeography.com, 2009-present).
Foodprint Project (foodprintproject.com, 2010-present)
Venue (v-e-n-u-e.com, 2012-present)
"You Are Here: Mapping the Psychogeography of New York City," Pratt Manhattan Gallery, September 24 – November 6, 2010 (solo work)
"One Million Years of Isolation: An Interview with Abraham Van Luik," with Geoff Manaugh, for Smudge Studio, *Making the Geologic Now*, Punctum Books (forthcoming 2013)
"The Generative Museum," Essay with Geoff Manaugh, for Patrick Keller et al., untitled monograph, JRP Ringier (forthcoming 2012)
"The Art of Growing Food," Essay in *Urban Farms*, Sarah C. Rich, Abrams (2012)
"On Flexible Urbanism," Essay with Geoff Manaugh, in *What is a City? Rethinking the Urban After Hurricane Katrina,* University of Georgia Press (2008)

Professional Memberships:
N/A

Name: Christian Uhl

Courses Taught:
A4005 Advanced Architecture Studio V
A4005:Advanced Architecture Studio V

Educational Credentials:
B.A. Painting, Miami University, 1993
B.E.D., Miami University, 1993
M.Arch., Bartlett School of Architecture, UCL 1999
The Independent Study Program, Whitney Museum, New York, 2000

Teaching Experience:
Adjunct Associate Professor of Architecture, 2011-present

Professional Experience:
Fitch, Boston, MA 1994-1996
Gensler, New York, NY 1996-1998
John Averitt Architect, New York, NY 2002-2005
NBBJ, New York, NY 2004-2005
Smith-Miller + Hawkinson Architects LLP, New York, NY, 2005-present

Licenses/Registration:
New York

Professional Memberships:
N/A

Name: Joshua Uhl, AIA, LEED AP

Courses Taught:
A4023 Architectural Drawing and Representation
A4535 Digital Craft
A4535 Fundamentals of Digital Design

Educational Credentials:
B.E.D., Miami University, 1995
M.Arch., Columbia University, 2002

Teaching Experience:
Adjunct Associate Professor, Columbia University, New York, 2002-present

Professional Experience:
Intern/Designer, Tobler Duncker Architects/ Barlow Architects, Jackson Hole, WY 1995-1999
Project Architect, Maya Lin Studio, New York, NY 2001-2002
Project Architect, Diller Scofidio + Renfro, New York, NY 2003-2005
Director of Design, Toshiko Mori Architect,PLLC, 2005-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
The Plan, "Syracuse Center of Excellence – Syracuse, USA" by Raymund Ryan, April 2011
Azure, "*Toshiko Mori Architect's Center of Excellence*" August, 2011
Bloomberg News, "Syracuse Builds $41 Million Green Incubator" by James Russell, March 2011
The Architect's Newspaper, "Unveiled: Brooklyn Children's Museum Rooftop", June 2011
Architect's Newspaper, "NYU's Expansive Approach" by Julie Iovine, April 2011

Professional Memberships:
The American Institute of Architects
USGBC, LEED AP

Name: Kazys Varnelis

Courses Taught:
A4004 Advanced Architecture Studio IV
A4515 Network Culture
A4722 Network City

Educational Credentials:
A.A, Social Sciences, Simon's Rock at Bard College, 1986
B.S. History of Architecture, Cornell University, 1988
M.A. History of Architecture and Urban Development, Cornell University, 1990
Ph.D. History of Architecture and Urbanism, Cornell University 1994

Teaching Experience:
History-Theory Faculty, Southern California Institute of Architecture, 1996-2005
Adjunct Assistant Professor, University of Pennsylvania, 2004
Senior Lecturer, University of Limerick, Ireland, 2005-present Adjunct Assistant Professor, Columbia University, 2006-present Director, Network Architecture Lab, Columbia University, 2006-present

Professional Experience:
Intern, Janus Keseru, AIA, 1987
Co-founder, AUDC, 2001-
Varnelis Group, LLC, 2009-

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Editor, *The Philip Johnson Tapes, Conversations with Robert A. M. Stern,* (New York: Monacelli Press and the Temple Hoyne Buell Center for the Study of American Architecture, 2008)
Editor, *Networked Publics,* (Cambridge, MA: The MIT Press, 2008)
Editor, *The Infrastructural City: Networked Ecologies in Los Angeles,* (Barcelona: ACTAR, 2008)
Co-Author with Robert Sumrell, *Blue Monday: Stories of Absurd Realities and Natural Histories* (Barcelona: ACTAR, 2007)

Professional Memberships:
Society of Architecture Historians
American Association of Museums

Name: Aniju Varughese, PE, LEED AP

Courses Taught:
Roving Engineers Program

Educational Credentials:
M.S.C.E., Columbia University, 2005
M.S.C.E., Cooper Union, 2002

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2011-2012

Professional Experience:
Structural Engineer, Arup, NY, 2002-2008
Façade Engineer, Arup, Spain & NY, 2008-2011
Façade Engineer, Thornton Tomasetti, NY, 2011-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
N/A

Professional Memberships:
The American Institute of Architects

Name: Joseph Vidich

Courses Taught:
A4781, Surface, Screen & Structure

Educational Credentials:
B.A., Wesleyan University, 2000
M.Arch, Columbia University, 2008

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2008-present
Adjunct Lecturer, CUNY College of Technology, 2012-Present

Professional Experience:
Project Architect, AA64, Brooklyn, NY, 2008-2010
Project Designer, Weiss/Manfredi, New York, NY, 2010-2011
Founder and Principal, PrePost, Brooklyn, NY, 2009-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Daniel Vos

Courses Taught:
A4634 Advanced Curtain Wall

Educational Credentials:
B.A. in Art and French, Calvin College, 1999.
M.Arch, Columbia University, 2004.

Teaching Experience:
Assistant Adjunct Professor, Columbia University, 2004-present

Professional Experience:
Architect, R. A. Heintges and Associates, New York, NY 2004-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Enrique Walker

Courses Taught:
A4402 Metropolis
A4106 Advanced Architecture Studio VI
A4803 The Dictionary of Received Ideas
A6011 AAD Moscow New York Workshop

Educational Credentials:
Architect (Honors), Universidad de Chile, 1992
M.A., Architectural Association, 1995
Ph.D., Architectural Association, 2012

Teaching Experience:
Lecturer, Universidad de Chile, 2001-2002
Assistant Professor, Universidad de Chile, 2003-2007
Adjunct Assistant Professor, Columbia University, 2003-2008
Visiting Assistant Professor, Pratt Institute, 2004-2005, 2007-2008
Visiting Professor, Tokyo Institute of Technology, 2009-2010
Adjunct Associate Professor, Columbia University, 2008-2011
Visiting Professor, Escuela Tecnica Superior de Arquitectura de Madrid, 2010-2011
Visiting Professor, Barcelona Institute of Architecture, 2010-2011
Visiting Lecturer, Princeton University, 2011-2012
Associate Professor, Columbia University, 2011–

Professional Experience:
N/A

Licenses/Registration:
Chile

Selected Publications and Recent Research:
"Scaffoldings," in *From Rules to Constraints: Luis M. Mansilla + Emilio Tuñón* (Zurich: Lars Muller Publishers, 2012), 74-79.
"A Conversation with Willem Jan Neutelings and Michiel Riedijk," in *El Croquis* 159: Neutelings Riedijk 2003-2012 (Madrid, 2012), 10-21.
"15 Notes + 5 Annotations: Iñaki Ábalos, Renata Sentkiewicz + Enrique Walker," in *2G* 56, Ábalos+Sentkiewicz (2011), 137-143.
"Compendium," in *The Architectures of Atelier Bow-Wow: Behaviorology* (New York: Rizzoli, 2010), 345-349.
Lo ordinario (Barcelona: Editorial Gustavo Gili, 2010)
"Fireworks," in *First Works: Emerging Architectural Experimentation of the 1960s and 1970s* (London: Architectural Association, 2009), 218-219.
Tschumi on Architecture: Conversations with Enrique Walker (New York: Monacelli Press, 2006)

Professional Memberships:
Colegio de Arquitectos de Chile

Name: David Wallance, AIA

Courses Taught:
A4114 Architectural Technology IV
A4115 Architectural Technology V
A4788 Modular Architecture: Strategy, Technology, Design

Educational Credentials:
B.Arch., The Cooper Union, 1980

Teaching Experience:
Associate Adjunct Professor; Columbia University, 1997-present

Professional Experience:
Project Architect, Associate, Rolf Karl Architect, New York, NY 1980-1985
Project Architect, Edward Larrabee Barnes Associates, New York, NY 1985-1993
Senior Associate, Polshek Partnership, New York, NY 1993-2005
Senior V.P. / Design and R&D, Global Building Modules, Inc., New York, NY 2005-2007
Principal, David Wallance Architect PLLC, New York, NY 2005-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
Inventor, System for Modular Building Construction, patented 2010 (with 38 continuation patents pending)
The Architecture Anthology, Alarm Press, fall 2012

Professional Memberships:
American Institute of Architects
National Council of Architectural Registration Boards

Name: Mark Wasiuta

Courses Taught:
A4033 CCCPArch Colloquium II: Contemporary Critical Discourse
A4581 Exhibition Histories, Curating Theories
A4002 Core Architecture II
A4006 Advanced Architecture Studio
A6853 Advanced Architecture Studio

Educational Credentials:
B.Arch., University of British Columbia, 1994
M.Arch., Princeton University, 1997
PHD candidate, Harvard University

Teaching Experience:
Architecture Studio Instructor (with Elizabeth Diller), Princeton University, 2002–2004
Visiting Adjunct Professor, University of Pennsylvania, 2005
Adjunct Associate Professor, Columbia University, 2006–current

Professional Experience:
Associate Curator, Canadian Center for Architecture, 1999–2000
Assistant Architect, Diller+Scofiio, 1997–1999, 2001–2003
Director of Exhibitions, Columbia University, 2006–current
Partner. International House of Architecture. 2008–current

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Collecting Architecture. Curator (with C. Buckley). Deste Foundation, Athens. 2012
Dan Graham's New Jersey. Co-editor. (Zurich: Lars Muller, 2011)
"New Jersey Inventory," in *Dan Graham's New Jersey*. (Zurich: Lars Muller, 2011)
"Cybernetic Guerrilla Warfare Revisited: From Klein Worms to Relational Circuits," in *Grey Room* 44, 2011. (with Felicity Scott)
"Instructions for the Reconstitution of Historical Smog," in Praxis 13, 2011. (with M. Sanchez)
"House Arrest" in *Art Lies* 68, 2011. (with M. Sanchez)
"New Soviet People will Conquer Cosmic Space," in *Volume* 25, 2010. (with Deane Simpson)
"Persistence of Informational Vision," in *Journal for the Society of Architectural Historians* 68, 2009
"Ant Farm Underground," in *Cabinet* 30, 2008
"Fuller's Global Switchboard," in Explorations in Architecture. (Basel: Birkhäuser, 2008)

Professional Memberships:
N/A

Name: Kevin C. Wei

Courses Taught:
A4378 Living Architecture I
A4379 Living Architecture II
A4791 Futures of the Past

Educational Credentials:
B.Arch., Carnegie Mellon University, 2006
M.S.A.U.D., Columbia University, 2008
Graduate Certificate in Advanced Architectural Research. Columbia University, 2009

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2009-present

Professional Experience:
Urban Designer, Skidmore Owings and Merrill, New York, NY, 2008
Interaction Designer, The Living, New York, NY, 2008-2010
Designer, Environmental Health Clinic at NYU, New York, NY, 2010-2011
Design Architect, Joel Sanders Architect, New York, NY 2010-2011
Designer/Owner, Kevin Wei New York, New York, NY, 2011-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: George Wheeler

Courses Taught:
A4124 Structures Systems and Materials I
A6786 Concrete Cast Stone and Mortar
A6784 Brick Terracotta and Stone
A6764 Basic Conservation Science and Laboratory

Educational Credentials:
B.A. Art History, Muhlenberg College, 1975
M.A. Art History, Hunter College, 1980
Certificate in Conservation, New York University, 1981
M.S. Chemistry, New York University, 1982
Ph.D. Chemistry, New York University, 1987

Teaching Experience:
Adjunct Professor, Conservation Center, New York University, 1991-Present
Director of Conservation, Columbia University, 2004-Present

Professional Experience:
Editor, Art and Archaeology Technical Abstracts, 1986-1994
Consultant, Dupont Research & Development, Wilmington, DE, 1999-2002
Contract Conservator, MMA, 1979-1980
Conservation Assistant, MMA, 1981-1982
Assistant Conservator, MMA, 1982-1983
Associate Conservator, MMA, 1984-1985
Associate Chemist, MMA, 1985-1988
Research Scientist, The Metropolitan Museum of Art, 1989-Present
Consulting Conservator, Isamu Noguchi Foundation, New York, 1989-Present
Director of Scientific Research, Art2Facts, New York, 1997-Present
Consulting Conservator, Villa La Pietra, Florence, Italy, 1997-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N. Rahbar, M. Jorjani, C. Riccardelli, G. Wheeler, I. Yakub, Ting Tan, W.O. Soboyejo, “Mixed mode fracture of marble/adhesive interfaces,” Materials Science and Engineering A, Volume 527, Issues 18-19, (15 July 2010) 4939-4946.
G. Scherer and G. Wheeler, “Silicate consolidants for stone,” Key Engineering Materials, v. 391, 2009, 1-25
G. Wheeler, “Alkoxysilanes and stone consolidation: where we are now,” Lisbon: LNEC, 2008.

Professional Memberships:
American Academy in Rome, Fellow American Institute for Conservation, Fellow Association for Preservation Technology, Member International Institute for Conservation, Fellow

Name: Christopher Whitelaw

Courses Taught:
A4766 Animated Computation I
A4743 Animated Computation II

Educational Credentials:
B.S. Arch., Georgia Institute of Technology, 1997
M.Arch., Columbia University, 2002

Teaching Experience:
Visiting Professor, University of Pennsylvania, 2004
Adjunct Assistant Professor, Columbia University, 2002-Present
Visiting Professor, Pratt Institute, 2004-Present
Area Co-Coordinator, Digital Media, Pratt Institute, 2006-Present

Professional Experience:
Director of Research & Development, Evans and Paul, LLC., 2007-Present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"Living City: A Public Air Quality Interface and a Platform for Buildings to Talk to One Another," in *Alphabet City: Air*, edited by John Knechtel (MIT Press, 2010): 176-185.
"Amphibious Envelopes," in *Sentient City: Ubiquitous Computing, Architecture, and the Future of Urban Space*, edited by Mark Shepard (Monacelli Press, 2010): 48-63.
"Flash Research," in *Young Architects 8: Instability* (Princeton Architectural Press, 2007): 20-45.

Professional Memberships:
N/A

Name: Mark Wigley

Courses Taught:
A4469 History of Architectural Theory

Educational Credentials:
B.Arch., University of Auckland, New Zealand, 1979
Ph.D., University of Auckland, New Zealand, 1987

Teaching Experience:
Assistant Professor, Princeton University, 1987-1995
Director of Graduate Studies, Princeton University, 1997-1999
Associate Professor, Princeton University, 1995-2000
Interim Dean, GSAPP, Columbia University, 2003-2004
Professor, Columbia University, 2000-Present
Dean, GSAPP, Columbia University, 2004-Present

Professional Experience:
N/A

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"The Open-Sourced Architect," in *Common Ground: A Critical Reader* (2012)
"The Reluctant Artist," in *Dan Graham's New Jersey*, (2012).
"The Myth of the Local," in *Architect's Journey's: Building Travelling Thinking* (2011).
Casa da Musica, (Porto: Casa da Musica, 2008).
Constant's New Babylon: The Hyper-Architecture of Desire, (010 Publishers, 1998).
White Walls, Designer Dresses: The Fashioning of Modern Architecture, (MIT, 1995).
The Architecture of Deconstruction: Derrida's Haunt, (MIT Press, 1993).
Deconstructivist Architecture. (New York: Museum of Modern Art Press, 1988)

Professional Memberships:
Society of Architectural Historians

Name: Sarah Williams

Courses Taught:
A4546 Cell City
A6232 Advanced GIS
A6233 Crowd Sourced City
A4577 Introduction to GIS
A4571 Stillspotting

Educational Credentials:
B.A. History and Geography, Clark University, 1997
M.C.P., Massachusetts Institute of Technology, 2005

Teaching Experience:
Lecturer, Massachusetts Institute of Technology, 2002-2003
Adjunct Assistant Professor, Columbia University, 2005-2012
Co-Director of Spatial Information Design Lab, Columbia University, 2005-2012

Professional Experience:
GIS Programmer, Clark Labs IDRISI Project, 1996-1999
Researcher, West Philadelphia Landscape Project, University of Pennsylvania, 1999-2000
Urban Stormwater Project Manager, Phildelphia Water Department Office of Watersheds, 2000-2001
Head of MIT GIS Laboratories, MIT Libraries, 2001-2003
Research Associate, SENSEable Cities Lab, 2003-2005

Licenses/Registration:
NA

Selected Publications and Recent Research:
Williams, Sarah, Elizabeth Marcello, Jacqueline Klopp, "Open Source Nairobi: Creating and Sharing a GIS Database of Nairobi for Community Empowerment", Annals of the Association of American Geographers, (Revise and Resubmit 2011)
Williams, Sarah and Elizabeth Currid - Halkett, “The Emergence of Los Angeles as a Fashion Hub: A Comparative Analysis of New York and Los Angeles Fashion Industry”, Urban Studies Volume 48 Issue 14, November 2011.
Currid, Elizabeth and Sarah Williams, “Two Cities, Five Industries: Similarities and Differences Within and Between Cultural Industries in New York and Los Angeles”, Journal of Planning Education and Research (March 2010) vol. 29 no. 3 322- 335.
Currid, Elizabeth and Sarah Williams, “The Geography of Buzz: art, culture and the social milleu in Los Angeles and New York”, Journal of Economic Geography, (July, 2009) pg 1-29.

Professional Memberships:
American Association of Geographer
Association of Collegiate Society of Planners

Name: T. Kelly WIlson

Courses Taught:
A4024 Architectural Drawing and Representation II

Educational Credentials:
M.Arch., Harvard University, 1982

Teaching Experience:
Design & Drawing Critic, Rhode Island School of Design, 1987-1995
Critic, Yale University, 1993-1996
Associate Professor, Harvard University, 1996-2010
Adjunct Associate Professor, Columbia University, 2009-2011
Associate Professor and Director of the IU Center for Art+Design, Indiana University, 2011-Present

Professional Experience:
Principal, Studio 922
Licenses/Registration:
NA

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Mabel O. Wilson, Ph.D

Courses Taught:
A4005 Advanced Architecture Studio V
A4642 Seminar Contested Grounds: The Spatial Politics of Memory/History
A4002 Core Architecture Studio II

Educational Credentials:
B.S. Arch., University of Virginia, 1985;
M.Arch., Columbia University, 1991;
Ph.D. American Studies, New York University, 2007

Teaching Experience:
Assistant Professor, University of Kentucky, 1991 – 1998
Associate Professor, California College of the Arts, San Francisco, 1999 – 2007
Associate Professor, Columbia University, New York, 2007 – present

Professional Experience:
KW:a, Oakland, CA and Ottawa ON, 1995 – 2007
6Ten Studio, New York, 2007 – present

Licenses/Registration:
N/A

Selected Publications and Recent Research
Negro Building: Black Americans in the World of Fairs and Museums (book), University of California Press, 2012
"Forging Metals and Modernity" (book chapter) *Post-Ductility,* edited by Michael Bell, NY: Columbia GSAPP Publication, 2012
"Urban Futures: Africa" in *Unplanned: Research and Experiments at the Urban Scale*, exhibition catalogue, New York and Los Angeles: Superfront Gallery 2010.
"Un-Real Estate" and "Gown Trounces Town 2-0" in the *New City Reader* for "The Last Newspaper Exhibition," New Museum, New York, New York, 19 November 2010
"Networking Diversity" for *ACSA News*, December 2009, Volume 39, number 4
"A Building and its Double" (book chapter) *Solid States,* edited by Michael Bell, New York: Columbia GSAPP Publication, 2010
Design Intelligence Africa (DIA), exhibition of GSAPP Studio Projects, Cape Town and Johannesburg, South Africa, 2012
Listening There – Scenes from Ghana, video/photograph exhibition with Peter Tolkin, Studio X - GSAPP, New York, New York , 2010
Smithsonian National Museum of African American History and Culture, Washington, D.C., competition finalist, partnered with Diller Scofidio + Renfro, Hood Design, Kling Stubbins 2009

Professional Memberships:
American Studies Association
College Art Association
Organization of American Historians

Name: Gwendolyn Wright

Courses Taught:
A6769 Histories of American Cities
A4598 Modern Housing
A4529 Colonial and Post-Colonial Architecture
A8904 Doctoral Colloquium: Cultural History and Architectural History

Educational Credentials:
B.A. History, Art History, New York University, 1969
M.Arch. U.C. Berkeley, 1974
Ph.D., U.C. Berkeley, 1978

Teaching Experience:
Associate Professor, Columbia University, 1983-87
Professor, Columbia University, 1987-Present

Professional Experience:
N/A

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Section editor, *Handbook of Architectural Theory,* ed. Hilde Heynen, Stephen Cairns and Geri Crysler. London: Sage Publications, 2012
'Apartment House," *L'aventure des mots de la ville,* ed. Christian Topalov. Paris: Robert Laffont/ CNRS/UNESCO, 2011
"Practicing Pragmatism in Metropolitan Design," *Making the Metropolitan Landscape: Design and Modernity in American Cities,* ed. Jacqueline Tatum and Jennifer Stauber. London & New York: Routledge, 2009
USA. London: Reaktion Books, Modern Architectures in History series, 2008
"Global Ambition and Local Knowledge," *Modernism and the Middle East,* ed. Sandy Isenstadt & Kishwar Rizvi. Seattle: U. Washington Press, 2007

Professional Memberships:
Society of Architectural Historians
Organization of American Historians
Urban History Association

Name: Soo-in Yang

Courses Taught:
A4378 Living Architecture I
A4379 Living Architecture II

Educational Credentials:
B.E., Yonsei University, South Korea, 1998
M.Arch., Columbia University, 2005

Teaching Experience:
Adjunct Assistant Professor, Columbia University, 2006-2011

Professional Experience:
Principal Designer, Soo-in Yang Design, Seoul, South Korea, 2011-Present
Principal Designer, The Living, New York City, 2005-2011

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"Living City: A Public Air Quality Interface and a Platform for Buildings to Talk to One Another," in *Alphabet City: Air*, edited by John Knechtel (MIT Press, 2010): 176-185.
"Amphibious Envelopes," in *Sentient City: Ubiquitous Computing, Architecture, and the Future of Urban Space*, edited by Mark Shepard (Monacelli Press, 2010): 48-63.
"Flash Research," in *Young Architects 8: Instability* (Princeton Architectural Press, 2007): 20-45.

Professional Memberships:
N/A

Name: Bryan Young

Courses Taught:
A4024 Architectural Drawing and Representation II

Educational Credentials:
B.A. Architecture, University of California at Berkeley, 1997
M.Arch., Harvard University Graduate School of Design, 2003

Teaching Experience:
Guest Professor, Tulane University, New Orleans, LA, 2005
Visiting Studio Critic, Syracuse University School of Architecture, Syracuse, NY, 2009
Adjunct Assistant Professor, Columbia University, New York, NY, 2010-present
Adjunct Assistant Professor, Parsons the New School for Design, New York, NY, 2012-present

Professional Experience:
Designer, Cee/Pfau Collaborative, San Francisco, CA, 1998-2000
Designer, Skidmore Owings & Merrill, San Francisco, CA, 2000-01
Designer, Skidmore Owings & Merrill, New York, NY, 2001-02
Project Lead, Architecture Research Office (ARO), New York, NY, 2003-05
Senior Associate and Office Lead, Allied Works Architecture, New York, NY, 2005-10
Principal, Young Projects LLC, Brooklyn, NY, 2010-present

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Michael Young

Courses Taught:
A4024 Architectural Drawing & Representation II
A4784 Representational Theories & Techniques

Educational Credentials:
B.Arch., California Polytechnic State University San Luis Obispo, 1997
M.Arch., Princeton University, 2005

Teaching Experience:
Visiting Professor, Shih Chien University, Taipei, Taiwan, Summer 2007
Visiting Professor, Crete Technical University, Crete, Greece, Summer 2010
Visiting Professor, Studio X, Columbia University GSAPP, Thessaloniki, Greece, Summer 2011
Assistant Professor, The Cooper Union, New York, NY, 2005 - present
Adjunct Assistant Professor, Columbia GSAPP, New York, NY, 2007 – present
Critic, Yale University School of Architecture, New Haven, CT, 2010 – present
Visiting Lecturer, Princeton University School of Architecture, Princeton, NJ, 2011 - present

Professional Experience:
Project Manager, Pfau Architecture, San Francisco, CA 1997-2003
Designer, Reiser-Umemoto, New York, NY 2004
Designer, Stan Allen Architects, Princeton, NJ 2005
Partner, Young & Ayata, New York, NY 2008 – present

Licenses/Registration:
New York

Selected Publications and Recent Research:
Lydia Kallipoliti, “The Envirobubble: Clean Air Pods Redux”, *SLUM Lab Magazine*, Fall 2011
“The Limits of Control” from *Pulsation in Architecture* ed. Eric Goldemberg, J.Ross Publishing, 2011
“The Stylus Vector” from *Paper Proceedings ACSA 100th Annual Meeting*, Spring 2012
“Digital Remediation” from *Cornell Journal of Architecture 9,* forthcoming Summer 2012
“Aesthetics/Anaesthetics”, Group Exhibition, Storefront for Art & Architecture, New York, Summer 2012

Professional Memberships:
N/A

Name: Andrew Zientek

Courses Taught:
A4006 Advanced Architecture Studio VI

Educational Credentials:
B.S.L.Arch., University of Wisconsin, 2002
M.L.Arch.., Harvard University, 2011

Teaching Experience:
Adjunct Associate Professor, Columbia University, NY, 2011-present
Adjunct Associate Professor, City College New York, NY, 2011-present
Instructor, Harvard University, 2012-present

Professional Experience:
Designer, Mahan Rykiel Associates, Baltimore, MD 2002-2004
Project Designer, EDAW/AECOM, Shenzhen, China 2004-2005
Director of Design, Himmelrich Associates, Baltimore, MD 2007-2009
Assistant, Piet Oudolf, Humelo, Holland 2010
Designer, Acconci Studio, Brooklyn, NY 2010
Principal, Andrew Zientek Landscape Architecture, Brooklyn, NY 2011-present

Licenses/Registration:
Delaware
Pennsylvania

Selected Publications and Recent Research:
Forthcoming – Directionality in Space and Time: From Homeric Greek to Facebook
Forthcoming – Nervous Landscapes: Human and Landscape Co-Evolution
Actar Press: GSD Platform 4 -- Contributor: "Nervous Landscapes"
Actar Press: GSD Platform 4 – Contributor: "Three States of Hors d'Oeuvres"
Green Building and Design -- Secret Garden Project Review, July/August 2011 P. 16
ASLA Dirt – Robert Irwin: The Mechanics of Experience
ASLA Dirt – Alexandre Chemetoff: Site as a Source of Imagination and Knowledge
ASLA Dirt – Vito Acconci's Provocative Spaces

Professional Memberships:
N/A

I.4.3 Visiting Team Report (VTR) from Previous Visit

Columbia University
Graduate School of Architecture, Planning and Preservation

Visiting Team Report

Master of Architecture (undergraduate degree plus *108* graduate credit hours)

The National Architectural Accrediting Board
21 February 2007

The National Architectural Accrediting Board (NAAB), established in 1940, is the sole agency authorized to accredit U.S. professional degree programs in architecture. Because most state registration boards in the United States require any applicant for licensure to have graduated from an NAAB-accredited program, obtaining such a degree is an essential aspect of preparing for the professional practice of architecture.

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I. Summary of Team Findings

1. Team Comments

Columbia University's Graduate School of Architecture, Planning and Preservation (GSAPP) is an extraordinarily rich program, with uncommon depth, breadth, and intellectual rigor. It possesses an administrative culture which believes that anything is possible and that every worthy initiative should be pursued and receive institutional support. The environment for educating the international student body is supportive and collegial.

The administration, under the leadership of Dean Mark Wigley, fosters not only an "open door" policy, but an "open mind" policy which enthusiastically embraces new initiatives. To address financial issues and alumni outreach opportunities, the school has created a new development office. The implementation of new research labs, including GIS, fabrication, and broadcasting contributes to an environment of well-rounded experimentation and applied research.

Recent appointments to the faculty complement a well respected cadre of scholars and professionals who are internationally recognized, dedicated, and supportive of the philosophy of the school.

Students are attracted to Columbia from countries around the world. They share a commitment to collaborative learning, experimentation, and to advancing a view of architecture beyond existing limits.

The program thrives on continuing to push the limits of technology amplified through a design process that is innovative. Recent programs examine the integration of fabrication with manufacturing processes and their potential impact on the built environment.

2. Progress Since the Previous Site Visit

Criterion 12.14, Accessibility

Ability to *design both site and building to accommodate individuals with varying physical abilities*

Previous Team Report: *This* is *clearly covered in the curriculum in* a *number of places, and* is *exhibited to the 'Understanding' level. However, the Team believes that* accessibility as *an integral concept to architectural environments* is *lacking in* a *fair amount of the* advanced *work.*

> There appears to be conscious effort to integrate accessibility into the core and advanced studio work at all levels, as well as to instill a basic understanding of this subject as an essential portion of the professional practice class.

Criterion 12.34, Professional Internship

Understanding of *the role of internship in professional development, and the reciprocal rights and responsibilities of interns and employers*

Previous Team Report: Awareness' *exists. However, knowledge of internship* as a *learning activity, understanding mentorship, and knowledge of intern's rights & legal compensation* issues *are not in evidence.*

The subject is covered formally in the professional practice class, and is reinforced by the professional culture of the practicing faculty. It is further evidenced by a substantial number of students indicating they had enrolled in the IDP program.

Causes of Concern (taken from VTR dated March 28, 2001)

A. Physical Resources. As *noted in Section I, 2.E, great strides have been taken in the area of physical resources. These have included the nearly completed building* safety *code, accessibility and HVAC upgrades to Avery Half, the expansions and renovation to the Avery Library that will be out to bid late this summer, future facility upgrades to Fayerweather which will include renovations to the shop and video/computer center, and improvements to Buell.*

The primary issue *of concern* is *the* 5,*000* SF *of computer/studio space the program occupies in Lion's Court. The* foss *of this space which* is *housed in* a *temporary building would lead to* a *step backward in terms of over-crowding at Avery if returned there, or would split the program at an off-campus site. The* GSAPP *and Columbia University need to develop* a *viable long-range plan for facilities. The proposed facility on 125th street is several* years *into the future for funding and* is less *than ideal with respect to effective use of space because it splits the program.*

This issue has largely been resolved. See 3.8 below.

B. Financial Resources. *The tuition driven funding formula for annual operations appears to be on par with other programs at Columbia. The* GSAPP has *added* a *member to the staff charged with development and alumni relations -- and has hopes of strengthening the alumni front for financial resources. There* seem *to be opportunities for increased annual gift-giving and endowment development. However, central financial aid resources, which affect recruitment of students (particularly affecting recruitment of minority students), need to be enhanced to assure future competitive health of the program. The central financial support for facilities needs to be sustained into the future until the space needs surrounding Lion's Court are resolved.*

This issue has largely been resolved with great progress since the last visit. See 3.10 below.

C. Curricular Issues. *The academic performance of the students* is *strong (see Section!, 3). The core studio sequence and the Building* Systems *and Envelopes and Environments courses have been reshaped with positive results (see Section I, 2.B,* C, & *0; and Section II, 12.13 & 29). The Team identified two concerns:*

1. *Virtually all professional practice and profession and society* issues *are covered in the single professional practice course.* Codes *and accessibility are covered in the building* systems *sequence. Ethical concerns are explored in* some *of the studios. While related Criteria are met, this* is a *curricular area that could use enhancement through additional electives and presents an opportunity for advanced scholarship to raise studies in this area on par with Columbia's leadership in history/theory, and computational design.*

2. *The work in Core on site, building* systems *integration, spatial inhabitation, codes and accessibility* is *excellent. However, the integration of these concerns* as a *habit of thought and design does not seem to be followed-up in exploratory advanced studios. The suggestion* is *not to dilute the richness of innovative studio content, but to see foundational capacities continually surfaced and informing advanced design.*

Both of these issues have been resolved.

D. Missed Opportunities. *The artistic, inter-institutional connections and international reach of the program afforded by the NYC location and the nature of the school are powerful assets. There seem to be three areas where the program could enhance its position: 1) establishing broader connections to more diverse firms in the New York practicing community; 2) local community involvement on par with the access to collaborating professionals, clients, community groups, and real programs that presently seems to be more typical of studio projects based at other US and international sites; 3) expanded inter-departmental curricular and research connections within the GSAPP and the University-- the resources and people are there, but connections are tenuous.*

These "missed opportunities" are largely addressed. See 3.1.4 below.

3. Conditions Well Met

1.5 Architectural Education and Society
13.2 Critical Thinking Skills
13.3 Graphics Skills
13.4 Research Skills
13.7 Collaborative Skills
13.8 Western Traditions
13.19 Environmental Systems
13.21 Building Envelope Systems
13.24 Building Materials and Assemblies

4. Conditions Not Met

13.25 Construction Cost Control
13.26 Technical Documentation

5. Causes of Concern

The school needs to provide formalized, consistent access for students to academic advisors who offer guidance towards successful completion of the degree, Master of Architecture.

The lack of refined physical models in student work indicates that the model shop cannot accommodate the full needs and opportunities of the program.

The lack of a representative number of African-American and latina/Hispanic students suggests that not enough effort has been applied to this serious social and cultural priority.

Some NAAB requirements were not evident in this program, including a representation of high pass and low pass projects for the team to review, a written statement on studio culture, and evidence of the preparation of outline specifications and construction cost estimating.

II. Compliance with the Conditions for Accreditation

1. Program Response to the NAAB Perspectives

Schools must respond to the interests of the collateral organizations that make up the NAAB as set forth by this edition of the NMB Conditions for Accreditation. *Each school is expected to address these interests consistent with its scholastic identity and mission.*

1.1 Architecture Education and the Academic Context

The accredited degree program must demonstrate that it benefits from and contributes to its institution. In the APR, the accredited degree program may *explain its academic and professional standards for faculty and students; its interaction with other programs in the institution; the contribution of the students, faculty, and administrators to the governance and the intellectual and social lives of the institution; and the contribution of the institution to the accredited degree program in terms of intellectual resources and personnel.*

Met	Not Met
[X]	[ ]

The Master of Architecture program benefits from active partnerships with other strong schools at Columbia affecting curricular and project interaction Uournalism, public health, engineering, and art history). The work of the various GSAPP research labs collaborating with other disciplines (urban planning, urban design, historic preservation, and real estate development) leads to enhanced communications and outreach. Avery Library is a wondrous resource in support of architectural education's research and connoisseurship. The school's cafeteria functions for both the GSAPP, and for faculty, staff and students from other departments, as a magnet and a social nexus.

The strong support from the provost's office, both in administrative backup and in fostering key start-up project costs, has enabled the graduate school and the architecture program to grow both in research and in the faculty.

1.2 Architecture Education and Students

The accredited degree program must demonstrate that it provides support and encouragement for students to assume leadership roles in school and later in the profession and that it provides an environment that embraces cultural differences. Given the program's mission, the APR may explain how students participate in setting their individual and collective learning agendas; how they are encouraged to cooperate with, assist, share decision making with, and respect students who may be different from themselves; their access to the information needed to shape their future; their exposure to the national and international context of practice and the work of the allied design disciplines; and how students' diversity, distinctiveness, self-worth, and dignity are nurtured.

Met	Not Met
[X]	[ ]

The interaction and communication of students within the school is evident and is exemplified by their energetic collaboration among peers, faculty, and allied professionals, all of which contribute to the overall studio culture. The diverse background of the academic community supports each student's social, intellectual and

cultural growth. The program inspires a community of future professional leaders who demonstrate confidence and positive self esteem.

1.3 Architecture Education and Registration

The accredited degree program must demonstrate that it provides students with a sound preparation for the transition to internship and licensure. The school may choose to explain in the APR the accredited degree program's relationship with the state registration boards, the exposure of students to internship requirements including knowledge of the national Intern Development Program (IOP) and continuing education beyond graduation, the students' understanding of their responsibility for professional conduct, and the proportion of graduates who have sought and achieved licensure since the previous visit.

Met	Not Met
[X]	[ ]

The faculty's active immersion into a broad cross-section of professional practice is a vital student resource for architectural registration providing a positive role model of professional conduct. The student body demonstrates an obvious appreciation and understanding of requirements for registration including the process of intern development (IOP). While the school does not formally track registration percentages of their alumni, it is apparent after discussion with many recent graduates that they are actively seeking and achieving registration in a timely manner. Paul Segal's enthusiasm exhibited in his professional practice class instills a deep appreciation of practice issues.

1.4 Architecture Education and the Profession

The accredited degree program must demonstrate how it prepares students to practice and assume new roles and responsibilities in a context of increasing cultural diversity, changing client and regulatory demands, and an expanding knowledge base. Given the program's particular mission, the APR may include an explanation of how the accredited degree program is engaged with the professional community in the life of the school; how students gain an awareness of the need to advance their knowledge of architecture through a lifetime of practice and research; how they develop an appreciation of the diverse and collaborative roles assumed by architects in practice; how they develop an understanding of and respect for the roles and responsibilities of the associated disciplines; how they team to reconcile the conflicts between architects' obligations to their clients and the public and the demands of the creative enterprise; and how students acquire the ethics for upholding the integrity of the profession.

Met	Not Met
(X]	[ ]

Preparation for entry into the profession is demonstrated not only in the professional practice class, but also by a rich interplay with experienced practicing full time and adjunct faculty. An increasing awareness of cultural diversity is evidenced through the composition of the class, faculty, and diverse range of studio projects. The New York Center for Architecture is utilized by the school to consistently engage the professional community. Visiting critics and guests also contribute to the awareness of the profession by their frequent presence in design studios. The school is currently in process of establishing an alumni support organization to further this outreach. However, any real student understanding of the resources offered by the American Institute of Architects is noticeably absent.

1.5 Architecture Education and Society

The program must demonstrate that it equips students with an informed understanding of social and environmental problems and develops their capacity to address these problems with sound architecture and urban design decisions. In the APR, the accredited degree program may cover such issues as how students gain an understanding of architecture as a social art, including the complex processes carried out by the multiple stakeholders who shape built environments; the emphasis given to generating the knowledge that can mitigate social and environmental problems; how students gain an understanding of the ethical implications of decisions involving the built environment; and how a climate of civic engagement is nurtured, including a commitment to professional and public services.

Met	Not Met
(X]	( ]

Well met:
The importance of an understanding of social and environmental changes permeates much of the curriculum at the GSAPP. Specifically, the following courses and/or sequences: 1) the core III housing studio; 2) the advanced studio V with Laurie Hawkinson and Kate Orff; 3) building systems II; 4) the joint studio with historic preservation in Mexico; and 5) the research labs, all expose the students to a broad cross-section of an architect's social and environmental responsibilities. Additionally, the multiple opportunities for students to intersect with leaders in government and other allied disciplines expand the limits of the classroom outside the studio walls, thereby enriching the students' overall experiences. The explicit overlaps between various facets of the curriculum, e.g., history/theory and design studio faculty reviewing technical seminar series projects expose students to the broader implications of their work.

Student participation in the International Union of Architects (UIA) World Congress in Istanbul, studying slums in Rio de Janeiro, and at the European MAPIC real estate conference in Cannes further their understanding of global societal issues.

2. Program Self-Assessment Procedures

The accredited degree program must show how it is making progress in achieving the NAAB Perspectives and how it assesses the extent to which it is fulfilling its mission. The assessment procedures must include solicitation of the faculty's, students', and graduates' views on the program's curriculum and learning. Individual course evaluations are not sufficient to provide insight into the program's focus and pedagogy.

Met	Not Met
(X]	[ ]

Course evaluations and attention to undersubscribed courses assure that weak courses will not survive. Public presentations by all studio faculty for the section-assigning lottery assures peer faculty scrutiny of studio-intentions. An annual end of term student work exhibition provides a means for directors of various programs to assess curricular outcomes and standards of production. Student portfolio reviews at the end of the first year and the beginning of the third year provide further monitoring of performance.

Alumni surveys are used to gauge the lasting effects of the Columbia architectural education. An alumni organization, in formation, will provide further assessment of the real learning achievements of the alumni. An active interim and final review system brings in area professionals, as well as students from other program levels, to provide external feedback.

3. Public Information

To ensure an understanding of the accredited professional degree by the public, all schools *offering an accredited degree program or any candidacy program* must *include in their catalogs and promotional media the exact language found in the* NMB Conditions for Accreditation, *Appendix A. To ensure an understanding of the body of knowledge and skills that constitute* a *professional education in architecture, the school must inform faculty and incoming students of how to access the* NMB Conditions for Accreditation.

Met	Not Met
(X]	( ]

The current catalog, published in 2003, contains the previous NMB required verbiage. The GSAPP has displayed the 2003 verbiage on its website. The school has provided each student with directions to the NMB website where students may find the exact verbiage of the NMB *Conditions for Accreditation.* Further it has affirmed its intention to update the text on the next iteration of its catalog, currently in publication.

4. Social Equity

The accredited degree program must provide faculty, students, and staff-irrespective of race, ethnicity, creed, national origin, gender, age, physical ability, or sexual orientation-with an educational environment in which each person is equitably able to learn, teach, and work. The school must have a *clear policy on diversity that is communicated to current and prospective faculty, students, and* staff *and that* is *reflected in the distribution of the program's human, physical, and financial resources. Faculty,* staff, *and students must* a/so *have equitable opportunities to participate in program governance.*

Met	Not Met
(X)	( )

While the school faculty and student body exhibit a positive gender and cultural balance in general, and hosts a widely diverse international group, more creative initiatives could be undertaken and financial resources channeled to specifically encourage greater applications and enrollment from African American and Latina/Hispanic students.

5. Studio Culture

The school is expected to demonstrate a *positive and respectful/earning environment through the encouragement of the fundamental values of optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and* staff. *The school should encourage students and faculty to appreciate these values* as *guiding principles of professional conduct throughout their careers.*

Met	Not Met
(X)	( )

The program exhibits a strong implicit commitment to a supportive studio culture as articulated in the APR and evidenced throughout the visit. Students, faculty, and administration all confirm a collective commitment to providing a positive and respectful learning environment, which is the intent of this condition. However, while the program has not fulfilled the specific requirement for a written studio culture document, it has articulated a process, inclusive of students, faculty and administrative personnel, to develop a document which will form a covenant between all parties on this critical issue. The resulting document should be included as a part of the next annual report.

6. Human Resources

The accredited degree program must demonstrate that it provides adequate human resources for a professional degree program in architecture, including a sufficient faculty complement, an administrative head with enough time for effective administration, and adequate administrative, technical, and faculty support staff. Student enrollment in and scheduling of design studios must ensure adequate time for an effective tutorial exchange between the teacher and the student. The total teaching load should allow faculty members adequate time to pursue research, scholarship, and practice to enhance their professional development.

Met [X] Not Met [ ]

The faculty enjoys significant support with a reasonable teaching load in order to pursue scholarly research and practice. The administration offers additional support with assistance to faculty to pursue research initiatives via grant applications and/or in-kind assistance. The commitment from the administration is commendable; however, an office supporting sponsored research that parallels aligned faculty research interests could strengthen the opportunities for faculty to seek additional funded research.

7. Human Resource Development

Schools must have a clear policy outlining both individual and collective opportunities for faculty and student growth inside and outside the program.

Met [X] Not Met [ ]

The Exhibitions and Speakers Series, with accompanying pubiications, are unmatched and contribute to the educational objectives of the curriculum. The Kinne Traveling Grants enabling worldwide travel opportunities for each student continue to enable a rich tradition of internationally based studio problems. Because of the wide and diverse trajectories the GSAPP experience supports, a structured framework for advising is needed to ensure consistent and comprehensive guidance for the students.

8. Physical Resources

The accredited degree program must provide the physical resources appropriate for a professional degree program in architecture, including design studio space for the exclusive use of each student in a studio class; lecture and seminar space to accommodate both didactic and interactive learning; office space for the exclusive use of each full-time faculty member; and related instructional support space. The facilities must also be in compliance with the Americans with Disabilities Act (ADA) and applicable building codes.

Met [x] Not Met [ ]

Significant improvements identified in the previous VTR have been successfully completed, including an impressive addition to the Avery Library and other spaces in Schermerhorn Hall. However, offices for all full time faculty do not yet exist. Additional critique space, staging areas, and an enlarged model shop also need to be addressed in future plans. According to the APR, the planned future expansion into the third floor of Fayerweather Hall will accommodate immediate needs for additional space.

9. Information Resources

Readily accessible library and visual resource collections are essential for architectural study, teaching, and research. Library collections must include at least 5,000 different cataloged titles, with an appropriate mix of Library of Congress NA, Dewey 720-29, and other related call numbers to serve the needs of individual programs. There must be adequate visual resources as well. Access to other architectural collections may supplement, but not substitute for, adequate resources at the home institution. In addition to developing and managing collections, architectural librarians and visual resources professionals should provide information services that promote the research skills and critical thinking necessary for professional practice and lifelong learning.

Met	Not Met
(X)	( )

Well met:
The Avery Library continues to be an internationally recognized strength of the program. The library's non-circulating collection of over 400,000 volumes encourages serious research within the physical context of the school. Immediate access to primary original materials makes it a hub for scholarly research and encourages cross-fertilization of all facets of the learning environment. A well organized and complete slide library provides a rich teaching platform. The school's commitment to taking a leadership position in digital information systems is laudable.

10. Financial Resources

An accredited degree program must have access to sufficient institutional support and financial resources to meet its needs and be comparable in scope to those available to meet the needs of other professional programs within the institution.

Met	Not Met
(X)	( )

The GSAPP is a tuition-based independent corporation, which receives no direct financial assistance from the university. It is responsible to raise its endowment and annual operating funds, supplementing tuition income with grants and other gifts. Two years ago the school established a development office with an experienced and energetic director, as well as a director of alumni affairs and a support staff person. Since initiation of this office, additional funds, now exceeding $375,000/year, assist the school and enrich its programs.

The school enjoys a reasonably healthy endowment, and the Kinne endowed fellowship and scholarship grant for school sponsored travel allows every student the opportunity to visit a venue of their choice tied to specific design studio assignments.

There was no information available to compare the financial situation of the school with other professional programs of similar size. However, the program appears to have sufficient financial resources to support the program and its initiatives.

11. Administrative Structure

The accredited degree program must be, or be part of, an institution accredited by one of the following regional institutional accrediting agencies for higher education: the Southern Association of Colleges and Schools (SACS); the Middle States Association of Colleges and Schools (MSACS); the New England Association of Schools and Colleges (NEASC); the North Central Association of Colleges and Schools (NCACS); the Northwest Commission on Colleges and

Universities (NWCCU); and the Western Association of Schools and Colleges (WASC). The accredited degree program must have a measure of autonomy that is both comparable to that afforded other professional degree programs in the institution and sufficient to ensure conformance with the conditions for accreditation.

Met	Not Met
(X)	( ]

This is provided in the APR.

12. Professional Degrees and Curriculum

The NAAB accredits the following professional degree programs: the Bachelor of Architecture (B. Arch.), the Master of Architecture (M. Arch.), and the Doctor of Architecture (D. Arch.). The curricular requirements for awarding these degrees must include professional studies, general studies, and electives. Schools offering the degrees B. Arch., M. Arch., and/or D. Arch. are strongly encouraged to use these degree titles exclusively with NAAB-accredited professional degree programs.

Met	Not Met
(X)	( ]

The Master of Architecture program meets this condition.

13. Student Performance Criteria

The accredited degree program must ensure that each graduate possesses the knowledge and skills defined by the criteria set out below. The knowledge and skills are the minimum for meeting the demands of an internship leading to registration for practice.

13.1 Speaking and Writing Skills

Ability to *read, write, listen, and speak effectively*

Met	Not Met
(X)	( )

13.2 Critical Thinking Skills

Ability to *raise clear and precise questions,* use *abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test them against relevant criteria and standards*

Met	Not Met
(X]	( ]

Well met:
A culture of rigorous scholarly research and experimentation is evident in all facets of the curriculum and interdisciplinary applications.

13.3 Graphic Skills

Ability to *use appropriate representational media, including freehand drawing and computer technology, to convey essential formal elements at each stage of the programming and design process*

Met	Not Met
(X)	( ]

Well met:
The visiting team observed a substantial commitment to taking a leadership position in emerging digital graphic skills, and applying digital data to projects. This is supported by both the administration, through the appointment of a director of visual studies and its support staff, and the students, who apply these technologies to enhance their research and embolden their design schemes.

13.4 Research Skills

Ability to *gather, assess, record, and apply relevant information in architectural coursework*

Met	Not Met
(X]	( ]

Well met:
The visiting team observed an unusually strong culture of research permeating every aspect of the school's curriculum, beginning with the 400,000 volume Avery Library, the most complete architectural and related studies collection in the world, and continuing to rigorous applications throughout all design studios and technical seminar studies.

13.5 Formal Ordering Skills

Understanding of *the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design, architectural composition, and urban design*

Met	Not Met
(X)	( )

13.6 Fundamental Skills

Ability to *use basic architectural principles in the design of buildings, interior spaces, and sites*

Met	Not Met
(X]	( ]

13.7 Collaborative Skills

Ability to *recognize the varied talent found in interdisciplinary design project teams in professional practice and work in collaboration with other students as members of* a *design team*

Met	Not Met
[X]	[ ]

Well met:
The team observed substantial situations where collaborative student efforts and interaction with research labs result in enriched studio projects. Specific assignments in the building technology series seminars produce thoughtful and integrated building systems schemes.

13.8 Western Traditions

Understanding of *the Western architectural canons and traditions in architecture, landscape and urban design, as well as the climatic, technological, socioeconomic, and other cultural factors that have shaped and sustained them*

Met	Not Met
(X]	( ]

Well met:
With more than 40 courses on western traditions, and a highly accomplished and internationally recognized history and theory faculty, the GSAPP provides an unparalleled offering providing rich exposure in this subject area.

13.9 Non-Western Traditions

Understanding of *parallel and divergent canons and traditions of architecture and urban design in the non-Western world*

Met	Not Met
(X]	( ]

13.10 National and Regional Traditions

Understanding of *national traditions and the local regional heritage in architecture, landscape design and urban design, including the vernacular tradition*

Mcl	Not Met
[X]	[ ]

13.11 Use of Precedents

Ability to *incorporate relevant precedents into architecture and urban design projects*

Met	Not Met
(X]	( ]

13.12 Human Behavior

Understanding of *the theories and methods of inquiry that seek to clarify the relationship between human behavior and the physical environment*

Met **[X]** Not Met [ ]

13.13 Human Diversity

Understanding of *the diverse needs, values, behavioral norms, physical ability, and social and spatial pa{terns that characterize different cultures and individuals and the implication of this diversity for the societal roles and responsibilities of architects*

Met **[X]** Not Met [ ]

13.14 Accessibility

Ability to *design both site and building to accommodate individuals with varying physical abilities*

Met **[X]** Not Met [ ]

13.15 Sustainable Design

Understanding of *the principles of sustainability in making architecture and urban design decisions that conserve natural and built resources, including culturally important buildings and sites, and in the creation of healthful buildings and communities*

Met [X] Not Met [ )

Given the importance of sustainable design, the two existing elective courses offered on this subject could strengthen the program if integrated into the required course work.

13.16 Program Preparation

Ability to *prepare* a *comprehensive program for an architectural project, including assessment of client and user needs,* a *critical review of appropriate precedents, an inventory of space and equipment requirements, an analysis of site conditions,* a *review of the relevant laws and standards and assessment of their implication for the project, and* a *definition of site selection and design assessment criteria*

Met **[X)** Not Met [ )

13.17 Site Conditions

Ability to *respond to natural and built site characteristics in the development of a program and the design of a project*

Met	Not Met
(X]	( ]

13.18 Structural Systems

Understanding of *principles of structural behavior in withstanding gravity and lateral* forces *and the evolution, range, and appropriate application of contemporary structural* systems

Met	Not Met
[X]	( ]

13.19 Environmental Systems

Understanding of *the basic principles and appropriate application and performance of environmental* systems, *including acoustical, lighting, and climate modification* systems, *and energy use, integrated with the building envelope*

Met	Not Met
(X]	( ]

Well met:
Five carefully sequenced required courses and four elective courses are well coordinated, providing a foundation for integrated systems in seminar and studio projects.

13.20 Life-Safety

Understanding of *the basic principles of life-safety* systems *with an emphasis on egress*

Met	Not Met
(X]	( ]

13.21 Building Envelope Systems

Understanding of *the basic principles and appropriate application and performance of building envelope materials and assemblies*

Met	Not Met
(X]	( ]

Well met:
In addition to the basic principles of engineering systems that affect building envelopes, the building technology sequence blends theoretical concepts with exacting technological verification to achieve realistic solutions to highly creative ideas.

13.22 Building Service Systems

Understanding of *the basic principles and appropriate application and performance of plumbing, electrical, vertical transportation, communication, security, and fire protection* systems

Met	Not Met
[X]	[ ]

13.23 Building Systems Integration

Ability to assess, *select, and conceptually integrate structural systems, building envelope systems, environmental* systems, *life-safety* systems, *and building service* systems *into building design*

Met	Not Met
[X]	[ ]

13.24 Building Materials and Assemblies

Understanding of *the basic principles and appropriate application and performance of construction materials, products, components, and assemblies, including their environmental impact and reuse*

Met	Not Met
(X]	( ]

Well met:
The collaboration of students with industry experts to explore materials and assemblies, creatively stretching their limits, is supported by the fabrication laboratory.

13.25 Construction Cost Control

Understanding of *the fundamentals of building cost, life-cycle* cost, *and construction estimating*

Met	Not Met
( ]	(X]

Issues of estimating construction costs, lifecycle costs, and the resulting material selection decisions were not in evidence in the required coursework to a level of understanding. General awareness of budgeting is introduced in fabrication electives and the Core III Housing Studio.

13.26 Technical Documentation

Ability to *make technically precise drawings and write outline specifications for* a *proposed design*

Met	Not Met
( ]	(X]

While technical skills are clearly apparent in the work of the students, the team found no evidence of writing outline specifications in any of the required course work.

13.27 Client Role in Architecture

Understanding of *the responsibility of the architect to elicit, understand, and resolve the needs of the client, owner, and user*

Met [X] Not Met [ ]

13.28 Comprehensive Design

Ability to *produce* a *comprehensive architectural project based on* a *building program and site that includes development of programmed spaces demonstrating an understanding of structural and environmental systems, building envelope systems, life-safety provisions, wall sections and building assemblies, and the principles of sustainability*

Met [X] Not Met [ ]

13.29 Architect's Administrative Roles

Understanding of *obtaining commissions and negotiating contracts, managing personnel and selecting consultants, recommending project delivery methods, and forms of service contracts*

Met [X] Not Met [ ]

13.30 Architectural Practice

Understanding of *the basic principles and legal aspects of practice organization, financial management, business planning, time and project management, risk mitigation, and mediation and arbitration as well as an understanding of trends that affect practice, such as globalization, outsourcing,* project delivery, expanding practice settings, diversity, and others

Met [X] Not Met [ ]

13.31 Professional Development

Understanding of *the role of internship in obtaining licensure and registration and the mutual rights and responsibilities of interns and employers*

Met [X] Not Met [ ]

13.32 Leadership

Understanding of *the need for architects to provide leadership in the building design and construction process and on issues of growth, development, and aesthetics in their communities*

Met [X] Not Met [ ]

13.33 Legal Responsibilities

Understanding of *the architect's responsibility as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, historic preservation laws, and accessibility laws*

Met	Not Met
[X]	( )

13.34 Ethics and Professional Judgment

Understanding of *the ethical issues involved in the formation of professional judgment in architectural design and practice*

Met	Not Met
(X)	( )

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III. Appendices

Appendix A: Program Information

1. History and Description of the Institution

The following text is taken from the 2007 Columbia University Architecture Program Report.

Columbia University was founded in 1754 as King's College by royal charter of King George II of England. It is the oldest institution of higher learning in the state of New York and the fifth oldest in the United States.

Controversy preceded the founding of the College, with various groups competing to determine its location and religious affiliation. Advocates of New York City met with success on the first point, while the Anglicans prevailed on the latter. However, all constituencies agreed to commit themselves to principles of religious liberty in establishing the policies of the College.

In July 1754, Samuel Johnson held the first classes in a new schoolhouse adjoining Trinity Church, located on what is now lower Broadway in Manhattan. There were eight students in the class. At King's College, the future leaders of colonial society could receive an education designed to "enlarge the Mind, improve the Understanding, polish the whole Man, and qualify them to support the brightest Characters in all the elevated stations in life." One early manifestation of the institution's lofty goals was the establishment in 1767 of the first American medical school to grant the M.D. degree.

The American Revolution brought the growth of the college to a halt, forcing a suspension of instruction in 1776 that lasted for eight years. However, the institution continued to exert a significant influence on American life through the people associated with it. Among the earliest students and trustees of King's College were John Jay, the first chief justice of the United States; Alexander Hamilton, the first secretary of the treasury; Gouverneur Morris, the author of the final draft of the U.S. Constitution; and Robert R. Livingston, a member of the five-man committee that drafted the Declaration of Independence.

The college reopened in 1784 with a new name-Columbia-that embodied the patriotic fervor that had inspired the nation's quest for independence. The revitalized institution was recognizable as the descendant of its colonial ancestor, thanks to its inclination toward Anglicanism and the needs of an urban population, but there were important differences: Columbia College reflected the legacy of the Revolution in the greater economic, denominational, and geographic diversity of its new students and leaders. Cloistered campus life gave way to the more common phenomenon of day students who lived at home or lodged in the city.

In 1857, the College moved from Park Place, near the present site of city hall, to Forty-ninth Street and Madison Avenue, where it remained for the next forty years. During the last half of the nineteenth century, Columbia rapidly assumed the shape of a modern university. The Columbia School of Law was founded in 1858. The country's first mining school, a precursor of today's Fu Foundation School of Engineering and Applied Science, was established in 1864 and awarded the first Columbia Ph.D. in 1875.

When Seth Low became Columbia's president in 1890, he vigorously promoted the university ideal for the College, placing the fragmented federation of autonomous and competing schools under a central administration that stressed cooperation and shared resources. Barnard College for women had become affiliated with Columbia in 1889; the

medical school came under the aegis of the University in 1891, followed by Teachers College in 1893. The development of graduate faculties in political science, philosophy, and pure science established Columbia as one of the nation's earliest centers for graduate education. In 1896, the trustees officially authorized the use of yet another new name, Columbia University, and today the institution is officially known as Columbia University in the City of New York.

Low's greatest accomplishment, however, was moving the university from Forty-ninth Street to the more spacious Morningside Heights campus, designed as an urban academic village by McKim, Mead, and White, the renowned turn-of-the-century architectural firm. Architect Charles Follen McKim provided Columbia with stately buildings patterned after those of the Italian Renaissance. The University continued to prosper after its move uptown in 1897.

During the presidency of Nicholas Murray Butler (1902-1945), Columbia emerged as a preeminent national center for educational innovation and scholarly achievement. The School of Journalism was established by bequest of Joseph Pulitzer in 1912. John Erskine taught the first Great Books Honors Seminar at Columbia College in 1919, making the study of original masterworks the foundation of undergraduate education, and in the same year, a course on war and peace studies originated the College's influential Core Curriculum.

Columbia became, in the words of College alumnus Herman Wouk, a place of "doubled magic," where "the best things of the moment were outside the rectangle of Columbia; the best things of all human history and thought were inside the rectangle."
The study of the sciences flourished along with the liberal arts. Franz Boas founded the modern science of anthropology here in the early decades of the twentieth century, even as Thomas Hunt Morgan set the course for modem genetics. In 1928, Columbia-Presbyterian Medical Center, the first such center to combine teaching, research, and patient care, was officially opened as a joint project between the medical school and The Presbyterian Hospital.

By the late 1930s, a Columbia student could study with the likes of Jacques Barzun, Paul Lazarsfeld, Mark Van Doren, Lionel Trilling, and I. I. Rabi, to name just a few of the great minds of the Morningside campus. The University's graduates during this time were equally accomplished-for example, two alumni of Columbia's School of Law, Charles Evans Hughes and Harlan Fiske Stone (who was also dean of the School of Law), served successively as Chief Justice of the United States Supreme Court.

Research into the atom by faculty members I. I. Rabi, Enrico Fermi, and Polykarp Kusch brought Columbia's Department of Physics to international prominence in the 1940s. The founding of the School of International Affairs (now the School of International and Public Affairs) in 1946 marked the beginning of intensive growth in international relations as a major scholarly focus of the University. The oral-history movement in the United States was launched at Columbia in 1948.

Columbia celebrated its bicentennial in 1954 during a period of steady expansion. This growth mandated a major campus building program in the 1960s, and, by the end of the decade, five of the University's schools were housed in new buildings.

It was also in the 1960s that Columbia experienced the most significant crisis in its history. Currents of unrest sweeping the country-among them opposition to the Vietnam War, an increasingly militant civil rights movement, and the ongoing decline of America's inner cities-converged with particular force at Columbia, casting the Morningside campus into the national spotlight. More than 1,000 protesting students occupied five

buildings in the last week of April 1968, effectively shutting down the University until they were forcibly removed by the New York City police. Those events led directly to the cancellation of a proposed gym in Morningside Park, the cessation of certain classified research projects on campus, the retirement of President Grayson Kirk, and a downturn in the University's finances and morale. They also led to the creation of the University Senate, in which faculty, students, and alumni acquired a larger voice in University affairs.

In recent decades, Columbia's campuses have seen a revival of spirit and energy that have been truly momentous. Under the leadership of President Michael Sovern, the 1980s saw the completion of important new facilities, and the pace intensified after George Rupp became president in 1993. A 650-million-dollar building program begun in 1994 provided the impetus for a wide range of projects, including the complete renovation of Furnald Hall and athletics facilities on campus and at Baker Field, the wiring of the campus for Internet and wireless access, the rebuilding of Dodge Hall for the School of the Arts, the construction of new facilities for the Schools of Law and Business, the renovation of Butler Library, and the creation of the Philip L. Milstein Family College Library.

The University also continued to develop the Audubon Biotechnology and Research Park, securing Columbia's place at the forefront of medical research. As New York City's only university-related research park, it also is contributing to economic growth through the creation of private-sector research collaborations and the generation of new biomedically related business.

A new student-activities center, Alfred Lerner Hall, opened in 1999 and features the Roone Arledge Auditorium and Cinema. Current building projects include major renovations to Hamilton Hall and Avery Library.

These and other improvements to the University's physical plant provide a visible reminder of the continuing growth and development of Columbia's programs of research and teaching. From its renowned Core Curriculum to the most advanced work now under way in its graduate and professional schools, the University continues to set the highest standard for the creation and dissemination of knowledge, both in the United States and around the world.

Clear in its commitment to carrying out such a wide-ranging and historic mission, and led by a new president, Lee C. Bollinger, Columbia was proud to celebrate its 250th anniversary in 2004 and now looks ahead to the achievements to come.

2. Institutional Mission

The following text is taken from the 2007 Columbia University Architecture Program Report.

Columbia University is one of the world's most important centers of research and at the same time a distinctive and distinguished learning environment for undergraduates and graduate students in many scholarly and professional fields. The University recognizes the importance of its location in New York City and seeks to link its research and teaching to the vast resources of a great metropolis. It seeks to attract a diverse and international faculty and student body, to support research and teaching on global issues, and to create academic relationships with many countries and regions. It expects all areas of the university to advance knowledge and learning at the highest level and to convey the products of its efforts to the world.

3. Program History

The following text is taken from the 2007 Columbia University Architecture Program Report.•

One of the first architecture schools in America, Columbia was established in 1881 by William R. Ware. A former student of Richard Morris Hunt (the first American to attend the Ecole des Beaux-Arts in Paris), Ware approached architectural education from a humanistic rather than a technical point of view. His appointment capped a distinguished career as a practicing architect, scholar, and teacher; it established the precedent, followed almost exclusively since then at Columbia, of entrusting the School's direction to architects with sustained professional experience.

In its early years, Columbia was the leading preparatory program for would-be architects intent on studying at the Ecole des Beaux-Arts in Paris. But by 1902 it had matured into a full-scale School of Architecture. Ware retired in 1903, to be succeeded by A. D. F. Hamlin. Hamlin stepped down from the position in 1912, when, with an enrollment of 140, the School moved into its new quarters, Avery Hall, designed by McKim, Mead, and White. Hamlin was succeeded by Austin Willard lord (1912-1915) and William Harry Carpenter (1915-1919).

In 1931, William A. Boring, who had been the School's director since 1919, became the first dean of what was then called the Faculty of Architecture. Under Boring and especially under his successor Joseph Hudnut, who took over in 1933, the curriculum was broadened dramatically. While the pre-World War I era had been dominated by the academic classicism of Ware, Hamlin, and such leading professionals as Charles Follen McKim, Thomas Hastings, and Henry Hornbostel, all of whom taught at the school, Boring and especially Hudnut encouraged the then nascent modernism and incorporated studies in town planning. Important studio critics, including the urbanistically inclined skyscraper architects Harvey Wiley Corbett and Wallace K. Harrison, joined the English town planner Raymond Unwin and the architectural historian Talbot Hamlin to create an environment in tune with the dramatic social and economic changes of the interwar years.

With Hudnut's departure for Harvard in 1935, the School, under the new dean leopold Arnaud, entered into a gradual decline that only began to reverse itself in the late 1950s when provocative studio critics Percival Goodman and Alexander Kouzmanoff, as well as the historian James Marston Fitch, gave the program new energy. Fitch's courses in architectural history blossomed into a program in historic preservation, established in 1966 as the first at an American university. Despite the vagaries of the postwar curriculum and an ambiguous commitment to graduate-level architectural education, the School continually benefited from New York City's prominence as a world capital and attracted many foreign students, some of whom would grow to professional prominence, including Romaldo Giurgola and Michael McKinnell.

After the short and vital but stormy tenure of Charles Colbert (1960-1963), Kenneth A. Smith, an engineer, was appointed dean, and in 1965 the School was organized along divisional lines, with planning and architecture each having its own chairperson. Charles Abrams was the first planning chair and Romaldo Giurgola the first for architecture. Abrams, with his wide experience in New York real estate and social planning, and his deep humanity, forged a program that balanced statistical analysis with compassion and earthy pragmatism. Giurgola built upon the design strengths of Kouzmanoff and Goodman, bringing into the studios as first-time teachers such bright young architects as Gio Pasanella, Jacquelin Robertson, Robert Kliment, and Ada Karmi Melamede.

The School's students played a central role in the protests that engulfed the University in the spring of 1968. While the tumultuous campus-wide demonstrations of that watershed year were triggered by a concern for America's role in international affairs, the architecture students played a particularly strong role in focusing the debate on the University's relationship to its neighbors in the Morningside Heights and Harlem communities. In addition, the students challenged the University's lackluster building program, protesting the construction of Uris Hall and the proposed gymnasium for Morningside Park.

James Stewart Polshek became dean in 1972. With strong professional connections with designer-architects, preservationists, and planners, Polshek tapped the School's inherent strengths and refined the graduate program while healing the wounds left over from the previous decade. He reshaped the design faculty and enriched the School's offerings in architectural history and theory, which were under the leadership of Kenneth Frampton, who also came to Columbia in 1972. As important, Polshek extended the School's reach both within and beyond the University, establishing a strong program of public lectures featuring leading architects, planners, and politicians; creating special programs for undergraduates in Columbia and Barnard Colleges; and helping establish the Temple Hoyne Buell Center for the Study of American Architecture in 1983. Under Polshek and his faculty, including especially Frampton, Giurgola, and Robert A. M. Stern, Columbia became an important focal point in the postmodernist debate.

Bernard Tschumi became dean in 1988, and the School's architecture programs, reflecting changing concerns in design, became more theoretical as they began to take on a more international flavor, capitalizing as never before on New York's status as a world city. To stimulate a sense of invention at the School and to use it as a laboratory for ideas, Tschumi gave junior faculty the freedom to be creative, expanding their research in the context of their studios. Sensing the role that computers would play in architectural design today, he fostered one of architecture's most significant forays into the digital age. During his time as dean, Tschumi tenured faculty in architectural theory as well as practice, including Stan Allen, Steven Hall, Laurie Hawkinson, and Mark Wigley, with Frank Gehry as Distinguished Professor. Under Tschumi, the School also developed a highly successful post-professional program, the degree in Advanced Architectural Design, as well as a Ph.D., in architecture.

Mark Wigley became dean in 2004 after a year as interim dean, and the School began to expand the experimental culture established by Bernard Tschumi. The collaborative links between all the programs and between the School and the wider university and professional community were intensified. New forms of aesthetic, technical, philosophical and ethical engagement were cultivated. Research and publication grew into a major part of the School with the establishment of a set of active applied research labs. With a revived curriculum and faculty, the School continues to foster a dynamic evolution of architectural artistry, intelligence, and technical expertise in partnership with its students.

4. Program Mission

The following text is taken from *the 2007 Columbia University* Architecture Program Report.

The Graduate School of Architecture, Planning and Preservation (GSAPP) is dedicated to the professional training of the next generation of architects. It seeks to provide a thorough preparation for the international practitioner while actively participating in the wider academic culture of a leading research university. The School tries to integrate these two goals, treating the professional care of the built environment as a form of rigorous research in its own right with important contributions to make to interdisciplinary

studies within the University, and treating the academic study of contemporary society and the environment in the University as a crucial resource and part of the professional responsibilities of the architect in practice.

To achieve this double goal, the basic structure of the M.Arch. Program combines a strict core of fundamental skills and knowledge with an advanced research culture. Both the core and experimental parts of the Program are understood to be vital to the School's ability to help the next generation of professionals dedicated to the built environment. Indeed, the experimental ethos of the School is understood as its major responsibility to both the University and the profession. This fusion of professional and experimental is the School's unique mission and the basis of its international leadership role. The Program devotes itself to the highest contemporary standards of professional practice through a very demanding program of study while creating the seeds for future standards through advanced investigations. The advanced work is dependant upon the core work, with a steady transition between core and advanced courses as students progress through the Program. Students are immersed in the accumulated wisdom and techniques of the profession–as represented by the historical and contemporary holdings in Avery Library, the diverse expertise of the faculty and their professional colleagues and consultants in the surrounding city, and a coordinated set of required courses-before being encouraged to participate in the evolution of new skills, approaches, technologies, and goals. This approach draws on the energy and imagination of a very diverse and highly motivated group of students and faculty to frame and investigate the key questions facing the profession in a collaborative manner. The result is a very intense program in which students, faculty, and administration are understood as colleagues dedicated to each other and to the state-of-the-art in the discipline. The mission is to produce graduates who will play a key leadership role in the architectural profession, serving their colleagues, clients, and communities around the world responsibly and creatively.

GSAPP is highly integrated into the wider University, and takes advantage of its unique asset of including under one roof all the disciplines devoted to the stewardship of the built environment (architectural design, urban design, urban planning, historic preservation, and real estate development), with each one sharing the same overall set of goals. Each of the respective programs works to train its graduates at the very highest possible level in both professional practice and exploratory research, while also collaborating to generate a holistic approach to the environment. The graduate programs are complemented by the undergraduate programs (Introduction to Architecture, the New York Paris Program, and the affiliated Architecture Program in Barnard College), post-professional programs (Master of Science in Advanced Architectural Design, and Master of Science in Architecture and Urban Design), and post-graduate programs (Ph.D. in Architectural History and Theory, and Ph.D. in Urban Planning). The M.Arch. Program acts as the flagship program of the School, with approximately one third of the overall student FTE of the School, but each and every program is meant to be an international leader. Increasingly, this kind of leadership is made possible by interdisciplinary collaboration on teaching, research, and applied projects. A collegial spirit and intense dedication to the major challenges facing stewards of the built environment drives every aspect of School life, and keeps setting new goals to be energetically pursued, with the results communicated to an international audience.

The School demands of itself that it be one of an extremely small group of programs that provide this kind of international leadership. The Dean's Statement-which appears on the School website and in each year's publication of student work, and is elaborated in numerous documents, speeches, and interviews and repeatedly communicated to prospective students, faculty, and alumni-identifies the School's core mission. It was prepared when the Dean first took up his position and published in the School's annual

publication of student work alongside a statement by the President of the University, reflecting their shared goals. In the President's Statement, Lee Bollinger wrote, "The distinctive urban university and an integral part of one of the great cities of the world, Columbia embodies New York City's qualities-it has always been international in scope, forward-looking in purpose, and unique in how it addresses the important questions of the day. The Graduate School of Architecture, Planning and Preservation has also been at the forefront of thinking innovatively and comprehensively about culture, society, urban life, and their special evolution. GSAPP has led the field in theory and practice for decades and continues to help redefine architecture and planning-most recently, for example, in applying new technologies and media to architectural design. The capacity to freshly imagine our cities and societies has never been more important than in the world of rapidly changing science, technology, and social challenges and opportunities in which we live today."

The main point of the Dean's Statement is that the unique mission of GSAPP turns on the capacity of each teacher to pass on the wisdom and best practices of the discipline while opening up the possibility for evolution. All aspects of the Program, including curriculum, faculty, classes, studio topics, visitors, events, publications, and exhibitions, are continuously tailored towards this ambition to equip and empower the next generation of architects for practice in a globalized workplace.

Dean's Statement (2003)

Education is all about trust. The best teachers embrace the future by trusting the student, supporting the growth of something that cannot be seen yet, an emergent sensibility that cannot be judged by contemporary standards. A school dedicated to the unique life and impact of the thoughtful architect must foster a way of thinking that draws on everything that is known in order to jump into the unknown, trusting the formulations of the next generation that by definition defy the logic of the present. Education becomes a form of optimism that gives our field a future by trusting the students to see, think, and do things we cannot.

This kind of optimism is crucial at a school like the GSAPP at Columbia. The students arrive in New York City from around 55 different countries armed with an endless thirst for experimentation. It is not enough for us to give each of them expertise in the current state-of-the-art in architecture so that they can decisively assert themselves around the world by producing remarkable buildings, plans, and policies. We also have to give them the capacity to change the
field itself, to completely redefine the state-of-the-art. More than simply training architects how to design brilliantly, we redesign the figure of the architect. Columbia's leadership role is to act as a laboratory for testing new ideas about the possible roles of designers in a global society. The goal is not a certain kind of architecture but a certain evolution in architectural intelligence.

Architecture is a set of endlessly absorbing questions for our society rather than a set of clearly defined objects with particular effects. Architects are public intellectuals, crafting forms that allow others to see the world differently and perhaps to live differently. The real gift of the best architects is to produce a kind of hesitation in the routines of contemporary life, an opening in which new potentials are offered, new patterns, rhythms, moods, sensations, pleasures,
connections, and perceptions. The architect's buildings are placed in the city like the books of a thoughtful novelist might be placed in a newsstand in a railway station, embedding the possibility of a rewarding detour amongst all the routines, a seemingly minor detour that might ultimately change the meaning of everything else. The architect crafts an invitation to think and act differently.

GSAPP likewise cultivates an invitation for all the disciplines devoted to the built environment to think differently. Its unique mission is to move beyond the highest level of professional training to open a creative space within which the disciplines can rethink themselves, a space of speculation, experimentation, and analysis that allows the field to detour away from its default settings in order to find new settings, new forms of professional, scholarly, technical, and ethical practice.

The heart of this open-ended laboratory is the design studios. All the overlapping and interacting programs at the school-Architecture, Urban Design, Historic Preservation, Urban Planning, and Real Estate Development-teach design and are united in their commitment to the global evolution of the 21st-century city. Every semester, the school launches more than 35 explorative studio projects that head off in different directions before reporting back their findings in juries, exhibitions, and publications that stimulate an intense debate and trigger a new round of experiments. With a biodiversity of continually evolving research trajectories, the School operates as a multi-disciplinary think tank, an intelligent organism thinking its way through the uncertain future of the discipline and the global society it serves.

As in any other architecture school, the real work is done in the middle of the night. Avery Hall, the school's neo-classical home since 1912-with its starkly defined symmetrical proportions communicating to the world the old belief that the secret of architectural quality is known, universal, and endlessly repeatable-now acts as the late night incubator of a diversity of possible futures. At its base is Avery Library, the most celebrated architectural collection in the world, a remarkable container of everything architects have been thinking about in the past, neatly gathered within the traditional quiet space of a well organized archive. Up above are the dense and chaotic studio spaces bristling with electronics and new ideas. Somewhere between the carefully catalogued past and the buzz of the as yet unclassifiable future, the discipline evolves while everyone else sleeps. Having been continuously radiated by an overwhelming array of classes and waves of visiting speakers, symposia, workshops, exhibitions, and debates, the students artfully rework the expectations of their discipline.

The pervasive atmosphere at GSAPP, the magic in the air from the espresso bar to the pin-up walls to the front steps to the back corner of the big lecture hall, is the feeling of being on the cutting edge, straddling the moving border between the known and the unknown in our field. It is hopefully an open, questioning atmosphere in which students are able to do work that teaches their teachers. In the end, a school's most precious gift is its generosity towards the thoughts that the next generation has yet to have.

5. Program Self Assessment

The following text is taken from the 2007 Columbia University Architecture Program Report.

Since the last accreditation visit, GSAPP has accepted many opportunities and challenges to grow and change on the academic, technological, and physical levels. As a result, the School is flourishing. The quality of applicants is going up, and students are coming to the School with a greater commitment to the practical, social, technical, and professional challenges facing the architect today, along with stronger abilities in research and communication. This has encouraged many teachers to raise the level of their individual classes, changed the balance of the faculty, and encouraged significant refinements and additions to the curriculum.

The main feature of this evolution is a greater school-wide sense of practical engagement (social, technical, ethical, political, and professional) in the challenges facing the architect today. GSAPP student work is increasingly based in real world engagement: studios have focused their analytical and design skills on difficult sites and urban issues, often working closely with city, community, and institutional support. An increasing proportion of the School is dedicated to applied research that bridges the once separate worlds of design and history/theory scholarship.

In parallel to this, there has been a substantial growth in cross-disciplinary exchanges and collaborative teaching and research. Research itself has grown to be a major, active part of the School, with the addition of new scholars and the foundation of a new set of research labs addressing a wide range of issues, as well as a greatly expanded publication program.

The single greatest strength of the School is the great spirit of collegiality and mutual respect between faculty and students, between programs, and between the School and the University. There is a deeply shared commitment to the evolution of our discipline by extending rigorous professional training into equally rigorous explorations of new potentials for the stewardship of the built environment.

Summary of Strengths

Leadership: GSAPP continues to play a key role in international debates by fostering pioneering work in design, history/theory, and technology.

Design Culture: GSAPP believes that it continues to fulfill its ambition to provide the most advanced design studios in the world, as part of its training of students to be future leaders in the design profession and faculty to be leaders in the University and in the wider community.

History/Theory Culture: GSAPP believes that it is maintaining its ambition to provide the most advanced scholarship available, having assembled an unmatched team of scholars from junior to mid-career to senior level.

Technology Culture: GSAPP believes that it is realizing its ambition to provide the most advanced study and applications of technology, with the establishment of a set of material, structural, and fabrication research projects that link state-of-the-art digital design practices to physical testing and construction.

Human resources: Student, faculty, and administration have been significantly strengthened.

Students: There has been an increase in selectivity through higher numbers of applications and raising TOEFL and GRE standards, and an increase in international representation, with students from around 60 different countries now attending the School.

Faculty: GSAPP has substantially upgraded the teaching faculty with a number of new hires and tenure appointments. A new generation of architects and scholars has been assembled to complement the strength of the senior faculty. The School's ten-year program to double the size of the full-time faculty is well underway.

Administration: The School has greatly expanded its administration team, with new positions in visual studies, special events, publications, GIS, networks and computation, development, and alumni relations.

Physical and Financial Resources: Since the last accreditation visit there has been a substantial upgrading of GSAPP's physical and financial resources.

Facilities: A set of new spaces have been added to address pedagogical and research goals, and almost all existing spaces have been upgraded. Three new satellite spaces for applied research are facilitating the new set of research units. Spaces in Buell Hall have recently been upgraded to provide additional jury and seminar space. Phase one of the major upgrade of Avery Library has been completed. The original ground floor 1911 Reading Room was completely restored as a key work of historic preservation, and a new Miriam and Ira D. Wallach Study Center for Art and Architecture, equipped with new storage, processing, and study facilities for Avery's Drawings and Archives collection, has been added. New automated shelving systems were added to the stacks to increase capacity. Throughout the School, there is a greatly improved array of audio-visual, computing, networking, wireless, modeling, 3d and 2d printing, laser cutting, and CNC fabrication equipment. Having pioneered the role of computer-aided design in architectural education, the School provides a state-of-the-art electronic design environment, with an extremely responsive IT team collaborating closely with faculty and students.

Finances: The School's finances are robust, with the build up of a healthy reserve and with a new fundraising campaign underway to address student financial aid and future needs.

Student Support: There is increased support for student events, publications, and travel opportunities. All students are supported in international travel for site visits during their final studio project and support is increasingly offered for research trips by history/theory seminar classes for national and international travel (recently, for example, to Italy, India/Pakistan, New Orleans, etc.).

Faculty Support: More support is now offered to junior faculty, including the inauguration of a new policy to give each full-time faculty member a paid semester of leave between their fifth and seventh semesters to help them develop the work required for consideration for tenure.

Curriculum: The M.Arch. curriculum has been refined in recent years through a series of cumulative structural adjustments. In both the design and history/theory/technology classes, a steady semester-by-semester increase in complexity, accompanied by an ongoing spirit of technical precision and critical inquiry, is carefully fostered.

Design Studios: The studio sequence has been tightened up with a more clearly established progression from the precise shared constraints of the first three Core Studios to the variety of explorations in the final three Advanced Studios. Greater attention is paid to establishing a gradual transition from Core to Advanced. Studio assignments in the first year-intended both to develop incoming students' design ? bilities as well as to expand their technical and conceptual capacity-are chosen in anticipation of the increased complexity encountered in the second and third years. To establish this calibrated transition, all three Core Studios are now supervised by a single Director who works closely with the Director of the three Advanced Studios to provide a comprehensive and cohesive curiculum. Each of the three Core Studios has a separate faculty coordinator who develops the specific design assignments in collaboration with the Directors of Core and Advanced Studios. Two new full-time faculty members have been hired with specific responsibility for coordinating the first and second semester studios with the Director of Core Studios coordinating the third semester. Lectures, seminars, and readings have been increasingly integrated into the Core sequence. The complexity of assignment and expected level of individual experimentation in the fourth

semester has been increased to provide a smoother transition to the final two Advanced Studios.

Visual Studies: A new position of Director of Visual Studies was established to institute an innovative system of six-week visual studies elective workshops selected by lottery that extend the required classes in digital and hand drawing. All basic techniques are now placed within a clear practical and conceptual context and the advanced workshops are able to go much deeper into a greater diversity of very specialized themes. This major change in course structuring has been extremely effective for both teachers and students. The use of the lottery system with students selecting from around 30 options each semester allows the array of these specialized methods-based workshops to be as responsive to shifts in the field, and as proactive in initiating such shifts, as the Advanced Studios.

Technology: Building Technology teaching has been enhanced by greater integration with the studio and history/theory classes. Teams of engineers are brought into Core Studios to offer feedback on student projects. Technology electives are now included in the array of visual studies workshop offerings and extended through independent study options and applied projects in the research labs. Public lectures and symposia increasingly focus on material, fabrication, assembly, and performance issues being investigated in the design studios with such events usually initiated by the design faculty. The core Building Technology sequence and advanced tech electives have become one of the central strengths of the program and a major source of inspiration to the wider initiatives at the School.

History/Theory: The range of course offerings has increased with the addition of new history/theory faculty and traditional lecture/seminar formats are now being supplemented with six-week seminar classes following the model of the visual studies electives. A broader cross-over zone between design and history/theory has been established with studios increasingly involving a research component and an increase in the number of history/theory seminars involving an element of design work. All history/theory faculty are now encouraged to teach a range of classes from core offerings (usually large survey lecture courses) to advanced explorative offerings (usually small focused seminar courses). As with the Advanced Studios, the focus of the exploratory classes changes frequently with the shifting interests of faculty and the wider discipline. Integration: The different elements of the M.Arch. curriculum are now more tightly integrated. A series of overlaps has been established between the newly calibrated core studio sequence, the history/theory lectures and seminars, the building technology sequence, and the visual studies workshops so that the program can all be understood by the students as a synthesis of the different forms of expertise crucial to architectural practice.

Practical Engagement: There has been substantial school-wide recommitment to all aspects of engagement in the wider context of architectural practice.

Material Practice: Having successfully developed highly experimental forms of architectural design over the last 15 years, faculty and students have become passionately dedicated to the constructability and realization of their work. As many of the junior faculty who carried out the more exploratory design work at GSAPP are now running increasingly successful practices with a growing scale of commission, they have brought their new commitment to constructability into the curriculum. There has been a thorough integration of conceptual and technical exploration. This was recently exemplified in a faculty and student collaborative team led by Professor Scott Marble that designed and built a new, award-winning slide library in the Columbia Department of Art History, as the first in a series of full scale construction projects. A new laboratory for one-to-one fabrication and assembly has been established to carry out this kind of work, and an

overall concern with constructability, and with passage of project through community, planning, and financing processes increasingly permeates the design studios as a whole_

Sustainability and Ecology: GSAPP faculty and students have become increasingly dedicated to questions of energy use. This commitment is reflected in the themes of studio projects, seminars, visiting lectures, conferences, and publications and is explicit in the student work and applied research carried out by faculty. It has been reinforced through permanent and adjunct faculty hires and the inauguration of dedicated research labs-like the joint GSAPP/U.S. Forestry Service Urban Field Station and the Urban Landscape Research Lab-as well as through specific long-term research projects, like the collaborative study with the University of Queensland.

Social Responsibility: Faculty and students are increasingly dedicated to the social context, impact, and responsibility of their work. This school-wide sense of commitment is evident in studio assignments, dedicated research labs, lectures, and symposia, which all increasingly address local, national, or international social issues, focusing on questions of poverty, disaster relief, environmental remediation, historic preservation, social justice, etc. Projects have ranged from emergency work for Ground Zero, New Orleans, Kabul, and Nairobi, to studies of key questions like affordable housing, the International Criminal Court, the prison system, globalization, and gentrification. This has lead to an increasing amount of collaborative work with community groups, public agencies, not-for-profits, etc. Faculty and students are deeply committed to the multiple responsibilities of the professional architect in actively contributing to the enhancement of the built environment while also acting as a public advocate for the many different dimensions of social justice.

Globalization: Having always seen itself and its core leadership mission in the international context, with a student body and teaching faculty from all other the world, recent years have seen the School deepen its engagement with the question of globalization that is having such a transformative affect on contemporary professional architects, their clients, and the wider communities that they serve. Through a wide array of interlocking studio assignments, history/theory courses, lectures, symposia, and both interdisciplinary and international partnerships, GSAPP is committing itself to making positive contributions in this key area.

Research: There has been a marked increase in the amount and type of research carried out within and by the School.

Research Labs: A new set of research units have been established to carry out applied research in conjunction with workshops, seminars, design studios, symposia, and publications. While less than two years old, these labs are already playing a major role in expanding the core curriculum, activating school-wide discussion, bringing the different programs into partnership with one another, linking the School to a wider set of partnerships in the University and the wider community, and identifying new professional responsibilities and assets for the professional architect.

Personnel: A new generation of teachers and staff has been hired with both Ph.D. training and their own design practices to act as a key bridge between the full-time scholars and the full-time practitioners.

Ph.D. Program: The Ph.D. Program in architectural history and theory, founded ten years ago, has now reached a critical mass and achieved a sense of momentum. It is treated as a major asset and an intimate part of the M.Arch. Program through the direct involvement of Ph.D. students as teaching assistants in history/theory and studio classes, juries, symposia, publications, and exhibitions. The 15 or so Ph.D. students in residence are all professionally trained architects that share the design students' commitment to

moving the discipline forward to meet its new challenges, and they play an important role in the M.Arch. Program.

Partnerships: In addition to the interdisciplinary partnerships with other departments of the University, major research partnerships with other institutions have been established for example with the Living Archive Project launched by GSAPP in collaboration with the Canadian Center for Architecture (CCA) in Montreal, where the two research institutions are sharing resources, expertise, classes, lectures, exhibitions. and publications.

Symposia: The number of research-based lectures and symposia has significantly increased. There were 12 full-scale conferences, colloquia, and symposia in the last year alone. These included events that focused on the current relationship between design and research, like the day-long "Paratheses" symposium on the evolution of the architectural thesis project and the two-part symposium "Unleashing the Archive-A New Partnership between Research and Design."

Interdisciplinary Work: At the same time as the M.Arch. curriculum has become more focused, there has been an exponential increase in the formal and informal collaborations between programs in teaching and research, as well as with other schools and departments within the University, and with other universities. Design studios as well as seminars are increasingly offered with team teaching and an interdisciplinary faculty.

Joint Studios: Within GSAPP, joint studios between Architecture and Historic Preservation, between Architecture and Urban Planning, and most recently between Architecture and Real Estate Development have become key sources of exchange and shared learning. Joint studios with other schools at Columbia (like the Schools of Engineering and Sociology) have also started to play an important role.

Joint Seminars: Historyrftheory classes are likewise increasingly co-taught in collaborations between programs at GSAPP and with faculty from other schools (like Anthropology and Germanic Languages).

Joint Research: There has been a substantial increase in the number of research projects carried out by teams that combine faculty from the different programs within GSAPP, or with faculty from other schools, like The School of Public Health, The School of International Public Affairs, The Earth Institute, The School of Engineering, etc. GSAPP has also entered long-term research partnerships with other universities, like The University of Queensland in Australia, and other research institutions, including the Canadian Center for Architecture in Montreal. Faculty and students from the M.Arch Program are increasingly playing a key role in these projects.

Events: The number and variety of public events has increased dramatically. These form an ever more substantial part of the School's curriculum, intersecting and supplementing the regular classes. The School prides itself on maintaining a quantity and quality of events far greater than any other school in the world, and benefits from rich interaction of these events with each area of the curriculum.

Diversification: The traditional lecture series has been expanded with the addition of evening panel discussions of key issues facing the field, and discussions of recently completed buildings, books, exhibitions, and films. A continuous series of lunchtime lectures, symposia, and conferences is offered in afternoons, evenings, and weekends for more detailed explorations. In addition to the substantial set of school-wide events, each of the programs at GSAPP runs its own lecture series every semester open to students from the other programs. There is rarely a lunchtime or evening without at least one event. The result is more than 250 speakers visiting the School in a semester. There

is such a density of events that students have to carefully choose those that they will attend in the same way that they choose classes.

Technology: GSAPP has installed a system that allows for the full array of multi-media presentations, with live feeds from the main auditorium broadcast to a series of viewing rooms in the building to accommodate over 1,000 spectators for the biggest events, video-conferencing for multi-site events, and real time video editing of events. Students continually take advantage of the fact that almost all the events in the main lecture hall are video recorded and available on DVD for later viewing.

Publications: With the establishment of a new publications office working in collaboration with some of the most highly regarded and innovative graphic designers, there has been an increase in the range and quality of journals, studio books, exhibition catalogs, symposium proceedings, edited collections, etc.

Studio Books: GSAPP is increasingly publishing books related to specific studio projects, whether of a single studio (like the joint Architecture/Historic Preservation studio in Mexico or the Advanced Studio "City Fragments, Beijing"), or a set of interrelated studios by one teacher (like Professor Karla Rothstein's publication on "Process" and Professor Ed Keller's monograph "Chronomorphology"), or a set of studios by different faculty working on the same theme (like the recent work on post-disaster New Orleans), or a sequence of studios of one teacher that have investigated a single issue in depth (like the forthcoming book on Lars Spuybroek's work on new modes of steel construction). The School is also publishing books related to a key History/Theory seminar class (like Bernard Tschumi's "Tri-Towers: Questioning Ground Zero"), or an important Visual Studies workshop (like Erieta Attali's classes in Architectural Photography).

Conference Proceedings: GSAPP is increasingly publishing major monographs based on major conferences (like *The Pragmatist Imagination: Think about 'Things in the Making,' Out of Ground Zero: Cases Studies in Urban Reconstruction, The State of Architecture at the Beginning of the 21st Century, Architourism,* etc.).

Journals: GSAPP has recently launched two new journals, *Future Anterior* and *volume,* which are both gaining ever wider international distribution.

Website: Having pioneered the use of the internet and e-publication of its work, the School's website has been greatly upgraded to provide what is probably the largest on-line archive of any school, with a continuously updated record of student and faculty work, publications, real-time events information, and individualized pages for all the different programs and research units, along with all key practical information about classes, school life, etc.

Student publications: In addition to supporting regular student journals, GSAPP now supports the publications of catalogs for exhibitions curated by the students themselves.

Outreach: There has been a renewed connection to the profession, alumni, consultants, public bodies, community groups, non-for-profits, other disciplines, other schools, and other universities. The School plays a very active role in a dense network of stakeholders and affi.

Curriculum: Studio projects and history/theory classes increasingly present the work of the architect as a dynamic mediation of an extremely wide range of forces; institutions, and forms of expertise. Juries increasingly feature an array of outside guests, from the usual set of teachers and practitioners to newly-included consultants, planners, clients, community groups, non-for-profits, research foundations, and public agencies.

Exhibition and Publication: GSAPP student work and initiatives are increasingly exhibited and presented off campus and in professional settings. Student design work is shown at the Center for Architecture, the Architectural League of New York, and at the Van Alen Institute-all strong centers of professional collegiality and exchange in the city. These centers form a clear link between academic and professional cultures. Studios have also exhibited their work at the United Nations, the Venice Biennale, the Aedes Gallery in Berlin, the Beijing Biennale, the Beyond Media exhibitions in Florence, etc., and are regularly featured in a wide array of national and international magazines. Almost all of the faculty are the subjects of national and international exhibitions and publications.

Fabrication: Much of the GSAPP outreach and engagement with the profession has centered on work addressing methods of fabrication as student work done on campus is increasingly addressing and defining a new engagement with construction. This work offers the profession an important research component and gives students a head start at creating meaningful professional opportunities that are still new to this generation; indeed they may represent a chance to affect the profession's ability to design and then realize ambitious new buildings.

Summary of Areas of Concern

Faculty Balance: While much of the creative energy of the M.Arch. Program derives from the energetic input and dedication of New York-based adjuncts, the proportion of full-time faculty to adjuncts needs to be adjusted to take advantage of the long-term commitment and wider administrative responsibility of full-time faculty. As the School has steadily deepened its Core Curriculum while expanding its modes of exploratory investigation, there is a greater advantage in having a larger core team of dedicated full-time faculty to guide the teaching and research and collaboratively stimulate new directions. The target was set three years ago to double the size of GSAPP's full-time faculty over the course of a decade. The School is on track to achieve this goal but will need to raise. additional money to support this initiative.

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Appendix B: The Visiting Team

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Appendix C: The Visit Agenda

NAAB TEAM VISIT
MASTER OF ARCHITECTURE PROGRAM
GRADUATE SCHOOL OF ARCHITECTURE, PLANNING AND PRESERVATION
COLUMBIA UNIVERSITY

February 17-21, 2006

SATURDAY, FEB 17	EVENT	PARTICIPANTS
Afternoon Hotel	Team arrives and checks in at hotel	Team (Met at airport)
4:00pm Hotel lounge	Team meets for introductions	Team (Met at hotel by Mark Wigley and David Benjamin)
4:30 – 6:30 pm Team Room, Avery 408	Initial Team Room visit, cursory review, orientation, set-up	Team Mark Wigley David Benjamin
7:00pm [Restaurant TBD]	Team dinner	Team
9:00pm Hotel	Tearn orientation and APR Review	Team
SUNDAY, FEB 18	EVENT	PARTICIPANTS
8:00 – 9:00 am Hotel	Team-only breakfast, Team assignments	Team
9:15am Hotel	Dean picks up Team at hotel	Team Mark Wigley
9:30 – 1:00 pm Team Room, Avery 408	Ongoing review of exhibits and records	Team
1:00 – 2:00 pm Schermerhorn 901	Tearn lunch with Dean and Directors	Team Mark Wigley David Hinkle David Benjamin Laurie Hawkinson Michael Bell - Reinhold Martin Anthony Webster Laura Kurgan Paul Segal Kenneth Frampton
2:00 – 3:00 pm Avery, Schermerhorn,	Tour of the School, including Avery Library, Conservation Lab, GIS Lab	Team Mark Wigley

Fayerweather, Buell		David Hinkle David Benjamin Laurie Hawkinson Michael Bell Reinhold Martin Mark Taylor John Ramahlo Gerald Beasley
3:00- 4:00 pm Avery Ware Lounge	Entrance meeting with the faculty	Team All Faculty
4:00- 6:00 pm Buell East Gallery	Meeting and review of exhibit with Building Technologies faculty Meeting and review of exhibit with Methods/Practice faculty Meeting and review of exhibit with Visual Studies faculty	Team Mark Wigley Anthony Webster Davidson Norris Mayine Yu Jay Hibbs Laurie Hawkinson Paul Segal Josh Uhl Laura Kurgan Sarah Williams Scott Marble Phil Anzalone
7:00pm [Restaurant TBD]	Team-only dinner	Team
Later Evening Hotel	Team recap	Team
MONDAY,FEBRUARY19	EVENT	PARTICIPANTS
8:00-9:30 am [Restaurant TBD]	Team breakfast with Dean	Team Mark Wigley
9:30 -10:30 am Team Room, Avery 408	Ongoing review of exhibits and records	Team
10:30-11:00 am Low Library 205	Entrance meeting with Provost	Team Provost Alan Brinkley
11:00 – 12:00 pm Dean's Office, Avery 402	Entrance meeting with School administrators	Team Mark Wigley David Hinkle Loes Schiller Janet Reyes Devon Provan John Ramahlo Mark Taylor Danielle Smoller
12:00 – 1:00 pm Team Room, Avery 408	Ongoing review of exhibits and records	Team

1:00 – 2:00 pm Avery Ware Lounge	Lunch with Design Studio faculty	Team Bernard Tschumi Steven Holl Laurie Hawkinson Yolande Daniels Michael Bell Richard Plunz Kate Orff Kathryn Dean Reinhold Martin Leslie Gill Galia Solomonoff Scott Marble Mark Rakatansky
2:00 – 3:00 pm Avery 500, 600, 700	Observation of studios	Team Laurie Hawkinson Michael Bell Reinhold Martin
3:00-4:30 pm Wood Auditorium	Team meeting with all M.Arch. students only	Team M. Arch. Students
4:30-5:30 pm Team Room, Avery 408	Ongoing review of exhibits and records	Team
6:30 - 8:00 pm Center for Architecture 536 LaGuardia Place	Reception with alumni and local practitioners	Team Alumni Local Practitioners
8:00pm Home of Dean	Team dinner with Dean, selected faculty and alumni	Team Faculty Alumni
Later Evening Hotel	Team recap	Team
TUESDAY,FEBRUARY20	EVENT	PARTICIPANTS
8:00-9:00 am [Restaurant TBD]	Team breakfast with heads of other programs	Team Mark Wigley Reinhold Martin Richard Plunz Paul Byard Michael Buckley Elliott Sclar Robert Beauregard Danielle Smoller
9:15 -10:30 am Team Room Avery 408	Ongoing review of exhibits and records	Team
10:30-11:30 am	Meeting with History/Theory faculty	Team

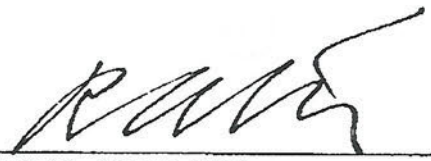
Avery 412		Kenneth Frampton Mary Mcleod Gwendolyn Wright Reinhold Martin Jorge Otero-Pailos Felicity Scott Joan Ockman Kazys Vamelis Enrique Walker
11:30-12:30 pm Avery 115	Meeting with Directors of Research Labs/Events/Publications	Team Mark Wigley Laura Kurgan Sarah Williams Kate Orff Scott Marble Phil Anzalone Jeannie Kim Mark Wasiuta Ben Prosky Jeffrey Inaba Kazys Varnelis
12:30 – 1:30 pm. Faculty House	Lunch with student representatives	Team Program Council
1:30 – 6:00 pm Team Room Avery 408	Complete review of records and exhibits	Team
6:30pm [Restaurant TBD]	Team-only dinner	Team
Later Evening Hotel	Tearn wrap-up report	Team

WEDNESDAY, FEB 21	**EVENT**	**PARTICIPANTS**
8:00- 9:00 am Hotel	Team breakfast and optional check-out	Team
9:30-10:30 am Dean's Office Avery 402	Team report to Dean	Team Mark Wigley Bernard Tschumi Kenneth Frampton Michael Bell Reinhold Martin Paul Segal Anthony Webster
11:00-11:30 am 205 Low Library	Team report to Provost	Team Provost Alan Brinkley

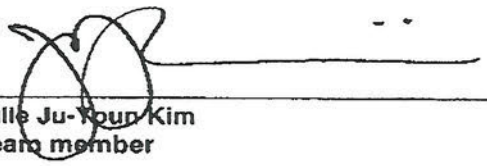
11:30-12:30 pm Avery Wood Auditorium	Tearn report to School	Team Faculty Students
12:30-1:00 pm Dean's Office Avery 401	Farewells with Dean	Team Dean
1:00pm	Departure	Team

IV. Report Signatures

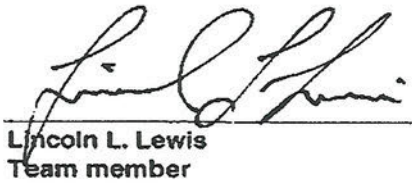
Respectfully submitted,



Ronald A. Altoon, FAIA
Team Chair
Representing the AIA



Julie Ju-Youn Kim
Team member
Representing the ACSA



Lincoln L. Lewis
Team member
Representing the AIAS

Stephen L. Parker, AIA
Team member
Representing the NCARB

Donna V. Robertson, FAIA
Observer

Ben Krone
Observer

I.4.4 Catalogs:

The All-School Bulletin is located at the following web address:

www.arch.columbia.edu/resources/bulletin

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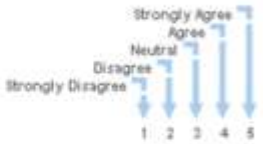
APPENDICIES

APPENDIX 1: Seminar/Lecture Evaluation by Students

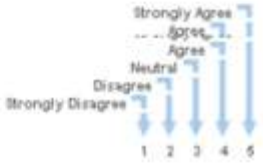
THE STUDENT

1. STUDENTS PROGRAM:
2. STUDENTS YEAR IN PROGRAM:



THE INSTRUCTOR

1. Well-prepared and organized
2. Committed
3. Accessible/Available
4. Receptive to Dialogue/Discussion
5. Supportive of students individual interests
6. Unbiased/engages students equally
7. What are the strengths and weaknesses of the professor teaching this course?



THE COURSE

1. Class held at arranged times
2. Fulfilled stated description/intent
3. Readings were valuable and effective
4. Assignments were valuable and appropriate
5. Presentation requirements were valuable and appropriate
6. Class Discussions were valuable and effective
7. Why did you register for the class? Requirements, personal interest, reputation of instructor or class, time slot?
8. Which lectures or seminars were most or least valuable? Please explain.

ADDITIONAL COMMENTS

1. Please make any additional comments that you wish about the overall assessment of the professor or course. (If applicable, please address the TA's role in the course.)

APPENDIX 2: Studio/Course Evalualtion by students

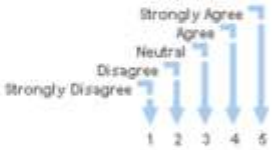
THE SECTION

1. INSTRUCTOR:
2. STUDENTS PROGRAM:
3. STUDENTS YEAR IN PROGRAM:

Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
1 2 3 4 5

THE CRITIC

1. Well-prepared and organized
2. Committed
3. Accessible/Available
4. Receptive to Dialogue/Discussion
5. Supportive of students individual interests
6. Unbiased/engages students equally
7. What are the strengths and weaknesses of the critic teaching this studio?



THE STUDIO

1. Class held at arranged times
2. Assignments were helpful in attaining studio goals
3. Desk Crits were valuable and effective
4. Pin-Ups were valuable and effective
5. Presentation requirements were valuable and appropriate
6. Studio Reviews with guests were valuable and effective
7. What are the strengths and weaknesses of the studio?

ADDITIONAL COMMENTS

1. Please make any additional comments. If applicable, please address the TA's role in the course.)

APPENDIX 3: Student Evaluation by Faculty

GSAPP

Columbia University's Graduate School of Architecture, Planning and Preservation

PLEASE RETURN TO 400 AVERY

Student Evaluation by Faculty (to be completed by studio critic)

DATE:
COURSE / SEMESTER:
CRITIC:
CONTACT (phone/ e-mail):
STUDENT:

In 4 to 6 sentences, please summarize the student's overall performance, growth and potential. Identify specific strengths and weaknesses, and specific areas where improvement is needed.

	EXCELLENT	GOOD	FAIR	UNSATISFACTORY
Commitment				
Self-Evaluation				
Development/ Synthesis of Concept				
Design Skills				
Verbal Communication				
Graphic Presentation				
Application of Technologies				
GRADE:	**HIGH PASS**	**PASS**	**LOW PASS**	**FAIL**

Additional Comments:

APPENDIX 4: Events

Gavin Browning, Director of Events and Public Programs
Paul Dallas, Coordinator of Events and Public Programs

Columbia University GSAPP offers a diverse range of free and public events for students, alumni, faculty, and fans: debates, panel discussions, conferences, lectures by emerging and established practitioners in all of the fields represented in Avery Hall, book launches, exhibitions, and more. GSAPP's main evening program takes place at 6:30pm in Wood Auditorium. Panels and discussions typically occur on Monday evenings, lectures by individual speakers on Wednesday evenings, and conferences and symposia on Fridays and the weekend.

During the 2011–12 academic year, the main GSAPP public program featured 23 lectures, 23 panel discussions, 14 conferences or symposia, and four exhibitions (despite the renovation of the School's traditional gallery space). Topics ranged from the pressing and political—design, energy efficiency, and nuclear policy in the wake of the disaster at the Fukushima Nuclear Power Plant; public housing in the US and abroad during a time of crisis and foreclosure; equitable distribution of transportation and open space resources in New York City today—to historical reconsiderations of architectural manifestos, the French urbanist collective group Utopie, the critics John McHale and Lewis Mumford, the current "post-parametric" moment, and the architects Félix Candela and Yoshiko Sato. Alongside, lectures were delivered by David Adjaye, Michael Arad, Solano Benitez, Alison Brooks, David Chipperfield, Odile Decq, Peter Eisenman, Zaha Hadid, Bernard Khoury, Jeanne Gang, Winy Maas, Juhanni Palassmaa, and many others. Large-scale conferences explored contemporary Colombian architecture and urbanism, technology transfer in India and other national contexts, housing and financial crisis, sustainability and urban migration in China, data and transportation, and governance and urban design. Finally, individual programs at GSAPP curated public conversations around sites of disciplinary interest in New York City: Willets Point and Corona Plaza in Queens, Pier 42 and the residential building HL23 in Manhattan, and the housing complex Via Verde in the Bronx.

Events within the main series also include the work of GSAPP's many experimental research labs—C-Lab, Network Architecture Lab, Urban Landscape Lab, Spatial Information Design Lab, to name a few—as well as the books and periodicals published by GSAPP Books, the exhibitions mounted in the Arthur Ross Architectural Gallery, the research projects of the Temple Hoyne Buell Center for the Study of American Architecture, as well as ongoing multi-disciplinary investigations of materials such as glass, concrete, metal, and plastic, and international think-tanks on the future of Architecture, Construction, and Engineering (C-BIP, or, the Columbia Building Intelligence Project) that have brought together industry leaders and academics in New York, London, Tokyo, Stuttgart, and Toronto.

Although the bulk of the main event series occurs on Columbia University's Morningside Heights campus, it also connects to the growing and international Studio-X network. For example, the 2009, 2010, and 2011 editions of GSAPP's annual "Ecogram" conference on design and sustainability featured supplemental exhibitions and conversations at Studio-X New York. One exhibition, *Safari 7 Reading Room*—a 2009 examination of wildlife and urban development along New York City's No. 7 Subway train, by Urban Landscape Lab Directors Janette Kim and Kate Orff and graphic designer Glen Cummings—used Studio-X Beijing as a home base in 2011 to create *Safari 4*, a similar investigation along the route of that city's No. 4 train.

In addition to the main series described above, individual programs at GSAPP produce lunchtime lectures. For example, the Urban Planning Program's Lectures in Planning Series (LiPS) and the Historic Preservation Program's Series bring planning and preservation

professionals, historians, and theorists to GSAPP to present recent work in informal, brown-bag settings. Likewise, the Urban Design, Real Estate Development, Ph.D. Program in Architecture, and Critical, Curatorial, and Conceptual Practices in Architecture Program have each curated program-specific conversations or series that are open to the entire GSAPP student body.

SUMMER 2012-FALL 2011

Spring 2012		
Anzalone, Phillip Chakrabarti, Vishaan Cole, Jonathan Duffy, Roger Duncan, Skye Frasca, Bob Kimmelman, Michael Koop, Colin Krumwiede, Keith Lee, Karen Marble, Scott Martin, Reinhold Massel, Tracy Newman, Clare Orff, Kate Organschi, Alan Priber, Garth Roberts, Jason Sample, Hilary Lee, Karen Wigley, Mark Williamson, June	GSAPP Alumni Forum 2012: Innovation and Collaboration in the Built Environment	April 27-28, 2012
Barber, Daniel Blake, Casey Nelson Caramellino, Gaia Clark, Shannan Heathcott, Joseph Halpern, Orit Harwood, John John, Richard Martin, Reinhold Osman, Michael, Scott, Felicity Stalder, Laurent Sze, Julie Wilson, Mabel Yablon, Nick	Buell Conference: "Technics and Art: Architecture, Cities, and History After Mumford"	April 13–14, 2012
GSAPP Students	Exhibition: "End of Year Show"	May 15, 2012
Tsukamoto, Yoshiharu	Lecture: "Who is the public in practice?"	April 18, 2012
Decq, Odile	Lecture: "What is black and white and red all over?"	April 11,

		2012
Bergdoll, Barry Ranalli, George Wigley, Mark Woods, Lebbeus	Panel: “How to reflect?” In association with *Clear Light: The Architecture of Lauretta Vinciarelli* at The City College of New York	April 9, 2012
van Berkel, Ben	Lecture: “What happened to architectural objectivity?”	April 4, 2012
Caldicott, Helen Orff, Kate	Panel: “Who cares?”	April 2, 2012
Asabashvili, Levan Briand, Jean-Francois Brito, Flavia Dolkart, Andrew Fischer, Sunny Heathcott, Joseph Kassou, Abderrahim van den Heuvel, Dirk Milnarik, Elizabeth Mirzikashvili, Rusudan Prudon, Theodore Watters, Diane	The Fitch Colloquium: “Why preserve public housing?”	March 31, 2012
Cruz, Teddy	The Inaugural Percival and Naomi Goodman Lecture: “Where is our collective imagination?”	March 30, 2012
von Osten, Marion	Lecture: “Why exhibitions?”	March 28, 2012
Andraos, Amale Freitag, Paul Garneau, Robert Gaumer, Elyzabeth Stein, William Wadman, Michael	Panel: “Where is New York? Affordability at Via Verde”	March 26, 2012
Jacque, Andrés Easterling, Keller Martin, Reinhold McMewen, Mitch Miessen, Markus Scott, Felicity D. Tan, Pelin Tisi, Rodrigo Wasiuta, Mark	Symposium: “Interpretations: Promiscuous Encounters”	March 23, 2012
Foster, Janet Mergenthaler, Ascan Platt, Charles Robertson, Rebecca	Panel: “How is history revealed? The Park Avenue Armory Restoration”	March 21, 2012
Steele, Brett Wigley, Mark	Discussion: “What is NY-LON?”	March 19, 2012

Anzalone, Phillip Barrett, James Birkenshaw, Douglas Brooks, Michael Chakrabarti, Vishaan Clewes, Peter el-Khoury, Rodolphe Faircloth, Billie Hathaway, Edwin Howell, Gregory Kolarevic, Branko Mallie, John Marble, Scott Margolis, Liat Mcateer, Eleanor McMonagle, Rob Neate, Darly Neumann, Oliver Nichilo, Livio Petricone, Pina Ranson, Jeff Renaud, A bert Sheehy, Paul Simmons, Robert Walters, Alex Welsh, Jane Wigley, Mark Witry, Mary Carol	Think Tank: :C-BIP Toronto: Vectored Resources"	March 8, 2012
Pinós, Carme	Lecture: "Where does architecture meet public space?"	March 7, 2012
Kimmelman, Michael Wright, Gwendolyn	Discussion: "Who's listening?"	March 3, 2012
Anzalone, Phillip Barton, Jake Benjamin, David Chung, Agnes Deamer, Peggy Fano, David Hathaway, Edwin Horgan, William Keenan, Jesse Kurgan, Laura Maleh, Nadine Marble, Scott Nichol, Bruce Parch, Mu Chan Pickering, Will Sarte, S. Bry Schwitter, Craig Wigley, Mark Wright-Ellis, Melissa	Think Tank: "C-BIP Brooklyn: Vectored Development"	Feb 24, 2012
Brooks, Alison	Lecture: "What is going on?"	Feb 22, 2012

Andraos, Amale Aureli, Pier Vittorio Bell, Michael Bergdoll, Barry Easterling, Keller Economopoulos, Beka Fennell, Catherine Fishman, Robert Gang, Jeanne Ingraham, Catherine Jones, Jason Low, Setha Lowe, Jeffrey Martin, Reinhold McEwen, Mitch Meredith, Michael Mijacki, Ana Mitchell, Don Rich, Damon Sample, Hilary Seong, Eunjeong Wood, Dan Zago, Andrew	Forum: "What is foreclosed? Housing, Suburbanization, and Crisis" (Organized by The Temple Hoyne Buell Center for the Study of American Architecture to mark the opening of the exhibit *Foreclosed: Rehousing the American Dream* at MoMA.)	Feb 18, 2012
Abraham, Daniel Beauregard, Robert Bhatt, Jigar Byrum, Greta Gotsch, Maria Jenkins, Peter Lee, Neil Mkinen, Saku Martinez-Vela, Carlos Nelson, Richard Pereira, Luciana Sampat, Bhaven Srinivar, Smita Wigley, Mark	Conference: "Building Blocks: Knowledge and Innovative Cities"	Feb 17, 2012
Gang, Jeanne	Lecture: "What comes after specialization?"	Feb 15, 2012
Fennell, Catherine Martin, Reinhold	Screening and Debate: "What was demolished?" *The Pruitt-Igoe Myth*	Feb 13, 2012
Billington, David Basterra, Alfonso del Cueto, Juan Ignacio Garlock, Maria de Madariaga, Inez Sanchez Pandas, Maria	Symposium: "Why Candela?" In association with exhibition *Félix Candela: 1910–2010* at Columbia University	Feb 11, 2012
Behrentz, Eduardo Echeverri, Alejandro Botero Ospina, Maria Helena	Conference: "What is social urbanism?" "Columbia at Columbia: Innovations in Architecture and Urbanism"	Feb 10, 2012

Cuervo, Isabel Gomez-Kopp, Milena Irazábal, Clara Herrera, Beatriz Elena Rave del Real, Patricio Otero-Pailos, Jorge Velez, Ana Elvira		
Fort-Brescia, Bernardo Spear, Laurinda	Lecture: "Will you tell me a story?"	Feb 8, 2012
Adler, Amy Dayal, Geeta Dockray, Sean Varnelis, Kazys Woods, Lebbeus	Panel: "How do you break the law?"	Feb 6, 2012
Chipperfield, David	The Paul S. Bayard Memorial Lecture: "What is the future of the past?"	Feb 2, 2012
Denari, Neil Naman, Alf Chakrabarti, Vishaan Sagalyn, Lynne	Discussion: "Where is New York? High Design at HL23"	Jan 30, 2012
Adjaye, David	Lecture: "When is now?"	Jan 25, 2012
Alschuler, John Ascher, Kate, Baldwin, Richard Borkland, Jay Braamskamp, Arjan Burden, Amanda Chakrabarti, Vishaan Gerrard, Michael Glen, Alicia Gupta, Ashok Hawkinson, Laurie Keenan, Jesse Kienzi, Nico Kimmelman, Michael Kriegel, Jay Kurgan, Laura Leland, Richard G. Livingston, John Park, Mu Chan Marble, Scott Martin, Reinhold Orff, Kate Pasquarelli, Gregg Shigematsu, Shohei Sutton, Stacey Themelis, Nickolas	Conference: "Where is more Manhattan?"	Jan 23, 2012

Fall 2011		
Albarelli, Gerry Azoulay, Ariella Becker, Carol Bernstein, Nina Campt, Tina Carby, Hazel Clark, Mary Marshall Cruz, Teddy Hartman, Saidiya Hirsch, Marianne Howard, Jean Jones, Ann McClintock, Anne Morris, Rosiland Q. L, Dinh Neshat, Shirin Ra'ad, Walid Sassen, Saskia Taylor, Diana Till, Karen van der Berg, Clive Weizman, Eyal Wexler, Laura Wilson, Mable	Injured Cities Conference: "When do cities recover from disaster?"	Oct 14-15, 2011
Bragdon, David Borret, Kristaan Camus, Barbara Chenot Frampton, Kenneth Pietrogrande, Paolo Plunz, Richard	Conference: "How are cities designed?" Mayors' Institute on City Design East 2011: "Urban Catalysts"	Dec 15, 2011
Baratloo, Mojdeh Camus, Barbara Chenot Chakrabarti, Vishaan Coatsworth, John Feitesse, Vincent Gold, Mayor Roy Holloway, Cas Hosterman, Mayor Jennifer Kaliski, John Kimm, Alice Neilsen, Signe Roach, Mayor Thomas Sarte, Bry Townsend, Anthony Zimmer, Mayor Dawn	Conference: "How are cities designed?" Mayors' Institute on City Design East 2011	Dec 14, 2011
Maas, Winy	Lecture: "Why ask why?"	Nov 29, 2011
Chan, Jason Frederick, Anne Kuehl, Kaja	Discussion: "Where is New York? Visions at Pier 42"	Nov 28, 2011

Reyes, Damaris		
Ascher, Kate Baker, William Katz, Paul Willis, Carol	Discussion and Book Launch: "Why does size matter?"	Nov 21, 2011
Buckley, Craig Colomina, Beatriz Eisenman, Peter Labarta, Carlos Schnapp, Jeffrey Scott, Felicity Tschumi, Bernard Vidler, Anthony Walker, Enrique Wigley, Mark	Symposium: "What happened to the architectural manifesto?"	Nov 18, 2011
Hadid, Zaha	Lecture: "What is new?"	Nov 16, 2011
Harkness, Jim Jun, Jiang Twilley, Nicola Yang, Guobin	Discussion: "How will super-sized cities feed themselves?" (Part of "Ecogram IV: China – Supercities and Mega-Migrations: China's Urban Futures")	Nov 15, 2011
Jun, Jiang Lu, Xiaobo Naisbitt, Doris Naisbitt, John Ying-Chun, Hsieh	Panel: "What is the architecture of sustainability?" (Part of "Ecogram IV: China – Supercities and Mega-Migrations: China's Urban Futures")	Nov 14, 2011
Abbas, Ackbar Buettner, Thomas Chakrabarti, Vishaan Chen, Xiangming Liu, Chang Liu-Farrer, Gracia Greenfield, Adam Hartman, Craig Henning, Sabine Hocking, Douglas Wyatt Huang, Ling Johnson, Jeffrey Khanna, Ayesha Khanna, Parag Lu, Yao Ren, Xuefei Sassen, Saskia Shigematsu, Shohei Theocharopoulou, Ioanna Xu, Jiang Yan, Ming	Conference: "What is the architecture of mega-migrations?" (Part of "Ecogram IV: China – Supercities and Mega-Migrations: China's Urban Futures")	Nov 11, 2011
Rahm, Philippe	Lecture: "How does architecture vaporize?"	Nov 9, 2011

Batty, Michael Brakewood, Candace Crews, Kenneth Daus, Matthew Eisnor, Di-Ann Frumin, Michael King, David Levinson, David McHugh, Bibiana Moss, Mitchell de la Pea, Benjamin Rojas, Francisca Sadik-Khan, Janette Sclar, Elliot Sterne, Rachel Townsend, Anthony Williams, Sarah	The Sigurd Grava Symposium on Infrastructure: "BitCity 2011: Transportation, Data, and Technology in Cities"	Nov 4, 2011
Khoury, Bernard	Lecture: "Where is the present in the Middle East?"	Nov 2, 2011
Belogolovsky, Vladimir	Lecture: "The Empire's Last Style: Soviet Modernism, 1955–1985"	Oct 31, 2011
Angotti, Tom Crean, Sarah Kittredge, Neil McKnight, Thomas Plunz, Richard	Discussion: "Where is New York? Apparitions at Willets Point"	Oct 31, 2011
Irazabal, Clara Kurgan, Laura Martin, Reinhold McKee, Yates Scott, Felicity Wilson, Mabel	Forum: "The Space of Public Appearance: Occupying American Cites"	Oct 26, 2011
Pallasmaa, Juhani	The Inaugural Kenneth Frampton Endowed Lecture: "How do we grasp space and place?"	Oct 19, 2011
Benjamin, David Prager, John Reed, Michael Slavin, Kevin	Panel: "What should computers do?" Post Parametric 5: Automation Futures of Computing and Design	Oct 17, 2011
Frampton, Kenneth Krohn, Carsten	Lecture: "The Unknown Mies"	Oct 12, 2011
Benitez, Solano	Lecture: "Why does every single brick hold desire?"	Oct 12, 2011
Carver, Erik Kim, Janette Ghosen, Rania Marcinkowski, Christopher Wald, Matthew	Discussion: "How do I learn to stop worrying and love nuclear energy?"	Oct 10, 2011
Gilmartin, MaryAnne	Lecture: "What are tomorrow's buildings today?"	Oct 5, 2011

Auricoste, Isabelle Buckley, Craig Cohen, Jean-Louis Goberna, Cristina TenHoor, Meredith Tonka, Hubert Violeau, Jean-Louis	Discussion: "Where is utopia?" On the publication of GSAPP Book Utopie: Texts and Projects, 1967-1978 (Off-site event at the Storefront for Art and Architecture)	Oct 4, 2011
Auricoste, Isabelle Buckley, Craig Cohen, Jean-Louis Tonka, Hubert Violeau, Jean-Louis	Discussion: "When is utopia?" On the publication of GSAPP Book Utopie: Texts and Projects, 1967-1978	Oct 3, 2011
Ross, Andrew	Lecture: "Who can stave off eco-apartheid?"	Sept 27, 2011
Brugurera, Tania Harris, Larissa Reddy, Prerana Scott, Felicity	Discussion: "Where is New York? Institutions and Immigration in Corona, Queens"	Sept 26, 2011
Buranasilapin, Savinee Dannecker, Tom	Lecture: "Who needs content?"	Sept 21, 2011
Armborst, Tobias Barley, Christopher D'Orca, Daniel Theodore, Gorgeen Therrier, Troy	Discussion: "What happens to a design deferred?"	Sept 19, 2011
Arad, Michael	Lecture: "How do we remember?"	Sept 14, 2011
Abboud, Michel Andraos, Amale Beauregard, Robert Bernheimer, Andrew Chakrabarti, Vishaan Fairbanks, Karen Hawkinson, Laurie Idenburg, Florian Kurgan, Laura Lewis, David Marble, Scott Martin, Reinhold Pasquarelli, Gregg Rodriquez, Susan Sguera, Leopoldo Smiley, David Smith-Miller, Henry Stark, David Tschumi, Bernard Tsurumaki, Marc Wood, Dan	Discussion: "What happened?" Open table discussion in conjunction with the exhibit Public Matters: New York Architecture After 9/11	Sept 12, 2011

Andraos, Amale Benjamin, David Couture, Lise Anne Hawkinson, Laurie Herreros, Juan Kurgan, Laura Sample, Hilary Walker, Enrique	Panel: "What is the future of the architectural studio?"	Sept 9, 2011

SPRING 2011-FALL 2010

Spring 2011		
Ascher, Kate Benjamin, David Daouti, Styliani Dykers, Craig Gartner, Lia Griffen, Maxine Hebbert, Frank Hunter, Meisha Kidd, Daniel King, David Klein, Eve Kornfield, Robert Krawchuk, John Lane, Robert Moore-Wi k, Meghan Peters, De ke Pinsky, Seth Pitruzzello, Philip Roz, Li Tsay, Shin-pei Varnelis, Kazys	GSAPP Alumni Forum 2011: "Smart Infrastructure: Negotiating the Future of Design"	April 13-15, 2011
GSAPP Students	Exhibition: "End of Year Show"	May 14, 2011
Appel, Hannah Clarno, Andy Diouf, Mamadou Fouquet, Thomas Fredericks, Rosalind Grabski, Joanna Ludl, Christine McGovern, Mike McKay, Ramah Murray, Martin Niang, Abdoulaye Obarrio, Juan Omezi, Giles Rabine, Leslie Roitman, Janet Simone, Abdou Maliq	The World and Africa Series Conference: "The Art of Citizenship in African Cities"	May 7, 2011

Hardt, Thomas	Lecture: "Love and Politics"	April 28, 2011
Ramakers, Renny Renfro, Charles Wasiuta, Mark	Discussion and Presentation: "Open House: Service Economy Hits the Suburbs" (Studio-X New York and Levittown, NY)	April 23, 2011
Farrell, Yvonne McNamara, Shelley	Lecture: "In Dialogue With Gravity"	April 13, 2011
Beauregard, Robert Lawson, Laura Schwartz, Terry	Debate: "Regenerative Urbanism: Cities After Depopulation"	April 11, 2011
Mathsson, Bruno Olsson, Mikael	Exhibition: *Södrakull Frösakull: Two Houses by Bruno Mathsson and Photographs by Mikael Olsson*	April 8, 2011
Martin, Reinhold Wilson, Mabel	2011 Buell Dissertation Colloquium (Discussion and presentation of selected papers by doctoral candidates)	April 8, 2011
Kadi, Makram El Jamaleddine, Ziad	Lecture: "Architecture Hurts"	April 6, 2011
Owen, David	Lecture: "Green Metropolis"	April 4, 2011
Graves, Michael Wigley, Mark	Honorary Keynote: "Permanent Change: Plastics in Architecture and Engineering"	March 31, 2011
Bell, Michael Lynn, Greg	Conference Keynote: "Permanent Change: Plastics in Architecture and Engineering"	March 30, 2011
Steele, Brett Wigley, Mark	Debate: "The Architecture of the Failure: Part II"	March 24, 2011
Tsien, Billie Williams, Todd	Lecture: "Constructing Stillness"	March 23, 2011
Hawkinson, Laurie Hillyard, Chris Johnson, Jeffrey Lu, Xiaobo Rappaport, Nina	Debate: "Future Chinese Factories: Transformation of the Industrial Urban Landscape"	March 21, 2011
Kasdin, Robert	Lecture: "Developing I.C.E. (Institutional, Cultural & Education"	March 2, 2011
Durst, Douglas	Lecture: "Real Estate According to Douglas"	Feb 23, 2011
Adams, Nicholas Celsing, Johan Dykers, Craig	Panel: "Common Ground: Current Themes in Scandinavian Architecture"	Feb 21, 2011

Frampton, Kenneth Pe konen, Eeva-Liisa		
Ahearn, Sean Anzalone, Phillip Barrett, James Benjamin, David Bernstein, Phillip Burney, David Coletta, Steve Eich, Tom Fox, Robert Grinspun, Eitan Hathaway, Edwin Jerimimenko, Natalie Kara, Hanif Kennedy, Sheila Kerr, Laurie Kilian, Axel Kotronis, James Kurgan, Laura Marble, Scott Mesa, Nilda Nastasi, John Poloni, Carlo Wigley, Mark Zahner, William	Think Tank: "C-BIP New York: (Re)Searching Knowledge"	Feb 18, 2011
Carroll, Mary Ellen Joselit, David Renfro, Charles Wasiuta, Mark	Roundtable: "Prototype 180: A Ground-Shifting Work by Artist Mary Ellen Carroll"	Feb 17, 2011
Amiry, Suad	Lecture: "Rejuvenating Palestine: Revitalization of Historic Centers–A Tool for Economic Growth"	Feb 16, 2011
Bell, Michael Buckley, Craig Casanova, Pascal Holl, Steven	Discussion and Book Launch: *Solid States: Concrete in Transition*	Feb 10, 2011
Angotti, Tom Irázabal, Clara Mazzanti, Giancarlo Perlman, Janice	Panel: "Debating Poverty Alleviation: Design and Planning Strategies"	Feb 10, 2011
Steel, Robert	Lecture: "City of Innovation"	Feb 9, 2011
Girit, Basar Gillick, Liam Renfro, Charles Shigematsu, Shohei Solomonoff, Galia	Panel: "Temporal Pavilions"	Feb 7, 2011
Boasberg, Tersh Butzel, Al Clark, Carol	Fitch Forum 2011: "45 Years of Preservation Law: New York City and the Nation"	Feb 5, 2011

Edmonson, Paul Goeken, Brian Gorden, Karen Hiss, Tony van Ingen, Ann Kayden, Jerold Kerr, John Mayes, Tom Pearsall, Otis Perlmutter, Margery Roddewig, Richard Silberman, Mark Weiss, John Wood, Anthony		
Indenburg, Florian Liu, Jing	Lecture: "To Be Continued"	Feb 2, 2011
Flood, Richard Grima, Joseph Rapp, Alan Varnelis, Kazys Wigley, Mark	Debate: "The New City Reader"	Jan 31, 2011
Makeka, Mokena	Lecture: "Diary of Dialectics: Musings on the Synthesis and Syntax of Space"	Jan 26, 2011
Benjamin, David Oxman, Neri Reed, Michael	Lecture: "Mediated Matter" Post Paramentric 4: Bio	Jan 24, 2011
Alonso, Hernan Diaz Antonelli, Paola Betti, Raimondo Bettum, Johan Buckley, Craig Carroll, William Colomina, Beatriz Dubbeldam, Winka Dyson, Anna Hawkinson, Laurie Herreros, Juan Holl, Steven Jeronimidis, George Kallipoliti, Lydia Kane, Brian Kennedy, Sheila Knippers, Jan Konyk, Craig Kwinter, Sanford Lavin, Sylvia Lord, Chip Marcaccio, Fabian Meredith, Michael Meyer, Christian Olsen, Erik Pailos, Jorge Otero		

Pearson, Bill Preusker, Werner Prudon, Theodore Roche, Francois Sample, Hilary Schenck, Rita Scott, Felicity Sobek, Werner Solomonoff, Galia Trumpf, Heiko Verpoest, Ignaas Wheeler, George Wigley, Mark		
Fall 2010		
Perrault, Dominique	Lecture: "Presence and Absence"	Nov 17, 2010
Beauregard, Robert Chakrabarti, Vishaan Ich kawa, Hirod Kubo, Takayuki Marcotullio, Peter Williams, Sarah	Debate: "Global Power City Index 2010"	Nov 15, 2010
Frampton, Kenneth Holl, Steven Joy, Rick Patkau, John Patkau, Patricia Saitowitz, Stanley Shim, Brigitte Sutcliffe, Howard	Conference: "Kenneth Frampton: The North American Anthology"	Nov 13, 2010
Hilal, Sandi Petti, Alessandro Scott, Felicity	Lecture: "Profaning Colonial Architecture"	Nov 10, 2010
Benjamin, David Khan, Azam Martino, Jacquelyn Nayar, Shree K. N kolovska, Lira Reed, Michael	Debate: "Post Parametric 3: Research"	Nov 8, 2010
Baratloo, Mojdeh Ratti, Carlo Rogers, Heather	Discussion: "Re-Fuse Ref-Use: Waste Stream"	Nov 3, 2010
Burden, Amanda	Lecture: "A Strategic Blueprint for New York City's Future"	Oct 20, 2010
Desir, Dowoti Irázabal, Clara Marks, Charles	Debate: "After Catastrophe / Before Design: Rebuilding Haiti After the Earthquake"	Oct 18, 2010

Sclar, Elliott		
Bragdon, David Dolkart, Andrew Kersavage, Lisa Platt, Charles Wadhams, Emily	Conference: "Preservation and Climate Change"	Oct 16, 2010
Kennedy, Sheila	Lecture: "The Appeal of the Real"	Oct 13, 2010
Freear, Andrew Lepik, Andres	Debate: "Small Scale, Big Change: A Model for Education"	Oct 11, 2010
Ponce de Leon, Monica	Lecture: "Approximations"	Oct 6, 2010
Becker, Carol Bernofsky, Susan Haag, Rosemarie Elcott, Noam McElheny, Josiah Quinlan, Eileen Papapetros, Spyros Preiss, Jeff Row, Heather Stuart, John Whitney, Tyler	Conference: "Doubtful Utopia"	Oct 4, 2010
Armstrong, Rachel Fisher, Dana Hoshaw, Lindsey Jacob, Klaus Lindsay, Greg Matthew, Richard Moore-Lappe, Francis Pe ken, Michael Redlener, Irwin R jcken, Ties Sanjiv, Amit Someshwar, Shiv Tuille, Noah Westing, Arthur	Conference: "Cities and Eco-Crises" (Part of "Ecogram III: Africa" Conference)	Oct 1, 2010
Doyle, Richard Flood, Richard Inaba, Jeffrey Wigley, Mark	Book Launch: "Counterculture" Volume 24	Sept 30, 2010
Kasekende, Louis Stiglitz, Joseph	Debate: "Global Aid in Africa: The Road Ahead in a Changing Economic Climate" (Part of "Ecogram III: Africa" Conference)	Sept 29, 2010
Joachim, Mitchell Kéré, Diébédo Francis Mbom, Robert Mutter, John	Debate: "Social Sustainability: Design and Entrepreneurship" (Part of "Ecogram III: Africa" Conference)	Sept 27, 2010

Plunz, Richard Theocharopoulou, Ionna		
Miller, Benjamin Moore, Justin G. Ruchala, Frank	Debate: "Waste Streams: Re-Fuse Ref-Use" (Part of "Ecogram III: Africa" Conference)	Sept 24, 2010
Okoye, Ikem Stanley Scott, Felicity Tolkin, Peter Wilson, Mabel	Debate: "Listening There: Scenes from Ghana" (Part of "Ecogram III: Africa" Conference at Studio-X New York)	Sept 23, 2010
Roche, Francois	Lecture: "Ecosophical Apparatuses and Schizoid Machines"	Sept 22, 2010
Enwezor, Okwui Diouf, Mamadou Linyekula, Faustin Joachim, Mitchell Theocharopoulou, Ioanna	Panel: "Cultural Ecology: Art and Culture as Catalysts for Sustainable Development in Africa" (Part of "Ecogram III: Africa" Conference)	Sept 20, 2010
De Smedt, Julien	Lecture: JDS/Julien De Smedt Architects	Sept 9, 2010
Schumacher, Patrik	Lecture: "Parametricism and the Autopoiesis of Architecture"	Sept 9, 2010

SPRING 2010-FALL 2009

Spring 2010		
Abramson, Daniel Busbea, Larry Light, Jennifer McDonough, Tom McLaren, Brian Massey, Jonathan Merwood-Salisbury, Joanna Naginsku, Er ka Serlin, David Steiner, Hadas Vinegar, Aron Wittman, Richard	Conference: "In Print: The Buell Conference in the History of Architecture"	April 16-17, 2010
Easterling, Keller	Lecture: "Disposition"	March 22, 2010
Roth, Steven	Lecture: "The Real Estate CEO"	March 3, 2010
GSAPP Students	Exhibition: "End of Year Show"	May 5, 2010
American Institute of Architects	Conference: "Rio 2016: Planning and Architecture for the	April 20 and

American Planning Association, NY Metro Chapter Waterfront Committee	Olympics"	April 23, 2010
Cezar, Sergio Correa-Smith, Raul Kaseman, Keith	Exhibition Opening at Studio-X New York: *Imagination Vessels*	April 22, 2010
Bucci, Angela Pirrandi, Ciro	Debate: "Young Practices in Brazil"	April 21, 2010
Mendes da Roche, Paulo	Untitled Lecture	April 19, 2010
Lerner, Jaime	Lecture: "Sustainable City"	April 14, 2010
Benjamin, David Grinspun, Eitan Lipson, Hod Matsumura, Miko Reed, Michael	Debate: "Post Parametric 2: Demo"	April 12, 2010
Birnbaum, Charles	The Paul S. Byard Memorial Lecture: "Why Not Cultural Systems? Design, Historic Preservation and Cultural Landscapes"	April 7, 2010
Beltramini, Guido Burns, Howard Eisenman, Peter Palladio, Andrea Rakatansky, Mark	Debate: "Recombinant Palladio"	April 4, 2010
Crinson, Mark	Lecture: "Architecture and the State: 1940s-1970s"	April 3, 2010
Sandercock, Leonnie	Lecture: "Healing Canada's Apartheid: Community and Regional Planning at the Margin"	March 31, 2010
Wodiczko, Krzysztof Ronduda, Łukasz Scott, Felicity Wasiuta, Mark	Exhibition: *Operators' Exercises: Open Form Film and Architecture*	March 29, 2010
Moussavi, Farshid	Lecture: "Form and Ornament"	March 24, 2010
Mitchell, Timothy	Lecture: "Carbon Democracy"	March 11, 2010
Perrault, Dominique	Lecture: "Presence and Absence"	Feb 26, 2010
Steele, Brett Walker, Enrique	Debate: "The Future of Architectural Education"	Feb 24,

Wigley, Mark		2010
Yaneva, Albena	Lecture: “Architecture Accountable”	Feb 23, 2010
Fry, Ben	Lecture: “Defining Data Visualization”	Feb 22, 2010
Tezuka, Takahauru Tezuka, Yui	Lecture: “Nostalgic Future”	Feb 17, 2010
Oshima, Ken Tadaski Pe konnen, Eeva-Liisa Vossoughian, Nader	Book Launch: “Just Released: New Books from Columbia’s Architecture Ph.D Program	Feb 15, 2010
Craig-Martin, Michael Gillick, Liam	Conversation: “Pictures and Places”	Feb 11, 2010
Ponce de Leon, Monica	Lecture: “Approximations”	Feb 10, 2010
Anzalone, Phillip Hasegawa, Toru Kim, Janette Orff, Kate Ratinam, Mathan Williams, Sarah	Debate: “Advanced Architectural Research: Part 2.0”	Feb 8, 2010
Association for Preservation Technology	Symposium: “Energy Efficiency, Insulation and Historic Building Envelopes”	Feb 5, 2010
Mansilla, Luis Tuñón, Emilio	Lecture: “Musac, Six Landscapes”	Feb 3, 2010
Frampton, Kenneth Kanach, Sharon Lieberman, David Mostel, Raphael	Debate: “Architecture as Total Art Work: Iannis Xenakis and Le Corbusier”	Feb 1, 2010
Rashid, Hani	Lecture: “Built for Speed”	Jan 27, 2010
Carlson, Trevor Fornabai, Michelle Kaiser, Paul Miller, Paul O’Conner, Tere Kwon, Annie	Performance and Panel: “No Fixed Points in Space: Transferring Form, Time, and Narrative Between Architecture and Performance”	Jan 26, 2010
Bartalini, Vladimir Cervera, Rosa Chion, Miriam del Real, Patricio Freeman, James	Conference: “Transnational Latin Americanisms: Liminal Places, Cultures, & Power (T)Here”	March 4-5, 2010

Gómez, Milena Gómez, Hannia Gómez-Barris, Macarena Inclán-Valadez, Cristina Jones, Gareth Libertun de Duren, Nora Lanz, Stephan Miraftab, Faranak Moreno, Maria Muxi, Zaida Olivo, Ingrid Pallamin, Vera Pedrazzini, Yves Rossi, Erika Tovar, Marcel Vázquez-Castillo, Teresa Zapata, Marisa		
Albrecht, Donald Bishop, Dan Isenstadt, Sandy Kauste, Juulia Martin, Reinhold McGuigan, Cathleen Pe konen, Eeva-Liisa Tsurumaki, Marc	Conference: "Saarinen@100"	Jan 29-30, 2010
Fall 2009		
Appaduri, Arjun Byfield, Ted Chatterjee, Partha Cutler, Claire Der Derian, James Environmentalists Against War Light, Jennifer Long, Susanne Marcuse, Peter Mehta, Suketu Morris, Rosalind Sassen, Saskia Schneider, Florian Sennett, Richard Stern, Jessica Urbonas, Gediminas Venkatesh, Sudhir Weizman, Eyal	Conference: "Cities and the New Wars"	Sept 25-26, 2009
Stiglitz, Joseph	Lecture: "Informal Urban Economies in the Global South"	Oct 13, 2009
Meredith, Michael Sample, Hilary	Lecture: "Everything All At Once"	Sept 23, 2009
Buck, Robert Diaz, Federico Heiss, Alanna Guerrero, Antoine	Lunchtime Panel: "Adhesion"	Sept 16, 2009

Dubbeldam, Winka	Lecture: “Habitat Fragmentation”	Sept 16, 2009
Mayer H., Jürgen	Lecture: “Re:Activators”	Dec 2, 2009
Diller, Elizabeth	Lecture: “Pointless”	Nov 30, 2009
Bergdoll, Barry Czech, Hermann Holl, Steven Pichler, Walter Safran, Yehuda	Book Launch: *The Head*	Nov 18, 2009
Czech, Hermann	Lecture: “Things That Look Like Nothing”	Nov 16, 2009
Alcolea, Ruben Colomina, Beatriz Frampton, Kenneth Papapetros, Spyros Solomonoff, Galia Scott, Felicity Wasuita, Mark	Conference: “Architects’ Journeys”	Nov 13, 2009
Flood, Richard Inaba, Jeffrey Müller, Lars Wigley, Mark	Book Launch: *The World of Giving*	Nov 12, 2009
Zittel, Andrea	Lecture: “Energetic Accumulators and Ideological Resonators”	Nov 11, 2009
Berger, Alan Frampton, Kenneth Raman, Mahadev	Debate: “After Bigness: Buffalo/Brooklyn—Designing for Post-Crisis Cities”	Nov 9, 2009
Anzalone, Phillip Barrett, Jim Bell, Michael Benjamin, David Bowman, Ronald Chakrabati, Vishaan Colletta, Steve Duffy, Roger Hawkinson, Laurie Hudson, Florence Howell, Gregory Kaseman, Keith Keough, Ian Kotronis, James Laufs, Wilfried Marble, Scott Park, Sean Samuels, Bradley Segal, Paul	Think Tank: “C-BIP (Columbia Building Intelligence Project) New York”	Nov 5, 2009

Sharples, Chris Snowdon, Jane Vollen, Scott Zahner, William		
Cho, Minsuk	Lecture: “Mass Studies”	Nov 4, 2009
Beauregard, Robert Morrish, William Varnelis, Kazys	Lecture: “Infrastructure of Urban Ecologies”	Oct 28, 2009
Dolkart, Andrew	Book Launch: “The Row House Reborn: Architecture and Neighborhoods in New York City 1908-1929”	Oct 26, 2009
Chakrabarti, Vishaan	Lecture: “The Future of Real Estate Development”	Oct 21, 2009
Brillet, Denis Dorell, Dan Ghotmeh, Lina Magrou, Raphael Marchi, Adelaïde Marchi, Nicola Riffaud, Pascal	Debate: “Architectes d’Aujourd’hui: Young Practices in France”	Oct 19, 2009
Cummings, Glen Kim, Janette Orff, Kate	Exhibition: “Safari 7 Reading Room” (At Studio-X New York as part of “Ecogram II: Architecture for a Crowded Planet”)	Oct 15, 2009
Jagger, Bianca	Lecture: “Climate Change and Human Rights” (As part of “Ecogram II: Architecture for a Crowded Planet”)	Oct 14, 2009
Brillembourg, Alfredo Crawford, Margaret Cruz, Teddy Joachim, Mitchell Klumpner, Hubert Theocharopoulou, Ioanna Werthmann, Christian	Debate: “Invisible Cities: Innovation and Complexity in Informal Settlements” (As part of “Ecogram II: Architecture for a Crowded Planet”)	Oct 12, 2009
Sagmeister, Stefan	Lecture: “Design and Happiness”	Oct 7, 2009
Rogoff, Irit	Lecture: “Participation”	Oct 6, 2009
Bell, Michael Beauregard, Robert Irazábal, Clara Martin, Reinhold Wilson, Mabel	Debate: “Public Housing: A New Conversation”	Oct 5, 2009
Anderson, Chris Benjamin, David Eastman, Chuck Reas, Casey Reed, Michael	Debate: “Post Parametric 1: Data”	Sept 28, 2009

Bronzaft, Arline Blomberg, Les Dent, Andrew Mostel, Raphael	Debate: "Noise! Design, Health and the Urban Soundscape"	Sept 21, 2009
Beck, Martin Scott, Felicity Wasiuta, Mark	Panel and Exhibition Opening: *Panel 2: Nothing Better than a Touch of Ecology and Catastrophe to Unite the Social Classes*	Sept 14, 2009
Antonelli, Paola Anzalone, Phillip Bell, Michael Benjamin, David Bicchiarell, Roberto Couture, Lise Anne Dyson, Anna Fernandez, John Frampton, Kenneth Hawkinson, Laurie Herreros, Juan Hernandez, Rosana Rubio Holl, Steven Kaseman, Keith Kwinter, Sanford Kumpusch, Christoph Lavin, Sylvia Malekshahi, Mark Mayes, Ronald McGowan, Rory Mertins, Detlef Meyer, Christian Miljacki, Ana Moneo, Jose Raphael Mori, Tosh ko Otero-Pailos, Jorge Prudon, Theo Reiser, Jesse Sample, Hilary Schober, Hans Schuler, Matthias Schwitter, Craig Scott, Felicity Sobek, Werner Solomonoff, Galia Tang, Man-Chung Trumpf, Heiko Umemoto, Nanako Wheeler, George Wigley, Mark Wilson, Mabel	Conference: "Post-Ductility: Metals in Architecture and Engineering"	Oct 1-2, 2009

SPRING 2009-FALL 2008

Spring 2009		

Alonso, Pedro Ignacio d'Auria, Viviana Barber, Daniel Bergdoll, Barry Fiore, Renato Holmer Frampton, Kenneth Gyer, Helen Martin, Reinhold Medrano, Ricardo Hernán Mendieta, Eduardo Oliver, Maria Isabel Otero-Pailos, Jorge del Real, Patricio Rocha, Ricardo Taveres, André Sagredo, Hugo Palmarola Sánchez, Salvador	Conference: "Ambiguous Territories: Articulating New Geographies in Latin American Modern Architecture and Urbanism"	March 27-28, 2009
Allais, Lucia Harwood, John Hyde, Timothy	2009 Buell Dissertation Colloquium	April 17-18, 2009
Simpson, Deane Wasuita, Mark	Discussion and Exhibition Opening: *New Soviet People Will Conquer Cosmic Space*	March 23, 2009
GSAPP Students	Exhibition: "End of Year Show"	May 16, 2009
Frampton, Kenneth Maltzan, Michael Shigematsu, Shohei Weiss, Marion	Debate: "Frank Lloyd Wright in the 21st Century: Being Versus Seeming"	April 13, 2009
Arrhenius, Thordis Beck, Martin Boelen, Jan Caldini, Carlo Choi, Binna Derossi, Pietro Dervis, Pelin Ericson, Magnus Herda, Sarah Lang, Peter Molinari, Luca af Petersens, Magnus Scott, Felicity Strum, Gruppo Wasiuta, Mark	Symposium and Exhibition: *Environments and Counter Environments: Experimental Media in Italy: The New Domestic Landscape, MoMA 1972*	April 10, 2009
Neuwirth, Robert Sassen, Saskia Srinivas, Smita	Lecture: "The Extroverted City of System D"	April 8, 2009
Aitken, Doug	Lecture: "Today!"	April 1, 2009

Axel, Richard Hecker, Florian Herz, Rachel Sarah Otero-Pailos, Jorge Sissel, Tolaas	Debate: "Abstraction in Experimental Preservation"	March 30, 2009
Tschumi, Bernard Walker, Enrique	Lecture: "Acropolis Transcripts"	March 25, 2009
Mayne, Thom	Lecture: "Overlapping Realities (Both This and That)"	March 4, 2009
Martin, Reinhold Scott, Felicity Tschumi, Bernard Vidler, Anthony	Debate and Book Launch: *Histories of the Immediate Present*	March 2, 2009
Schlossberg, Edwin	Lecture: "Design and Visualization"	Feb 25, 2009
Charnoski, Rick Kayden, Jerold Nichols, Coan Rodriguez, Steve Williams, Sarah	Screening and Debate: *Deathbowl to Downtown*	Feb 23, 2009
Araoz, Gustavo de Anda, Enrique Cavalcanti, Lauro Casal, Stella Maris Condi, Alfredo Gòmez, Hannia Grementieri, Fabio Noelle, Louise Otero-Pailos, Jorge Segawa, Hugo	The Fitch Colloquium: "Twin Phenomena: Preservation and Modern Architecture in Latin America"	Feb 21, 2009
Koolhaas, Rem	Paul S. Bayard Memorial Lecture: "Hermitage 2014"	Feb 20, 2009
Wu, Tong Zhu, Pei	Lecture: "Interlaced Logic"	Feb 18, 2009
Godsill, Benjamin Grima, Joseph Inaba, Jeffrey Jiang, Jun Johnson, Jeffrey	Book Launch: *Urban China Bootlegged by C-Lab for Volume*	Feb 16, 2009
Dolkart, Andrew Selldorf, Annabelle	Lecture: "Architecture and Context"	Feb 11, 2009
Benjamin, David Inaba, Jeffrey Johnson, Jeffrey	Panel: "Advanced Architectural Research"	Feb 9, 2009

Kurgan, Laura Marble, Scott Vanrelis, Kazys		
Leeser, Thomas	Lecture: "Conflict"	Feb 4, 2009
Kéré, Diébédo Francis	Lecture: "Step by Step: Building Schools in Africa"	Feb 3, 2009
Lopate, Phillip Mitchell, Stacy Perrette, Virginie-Alvine Tsien, Billie Sutton, Stacey Weiner, Vicki Williams, Todd	Debate: "Urban Visions: The Neighborhood Store in the Shadow of Redevelopment" Screening: *Twilight Becomes*	Feb 2, 2009
Bunge, Eric Hoang, Mimi	Lecture: "Control"	Jan 28, 2009
Bach, Gabriel	Presentation: "The New GSAPP Website"	Jan 26, 2009
Demand, Thomas	Lecture: "Fiction, Fact, and Fabrication"	Apr il15, 2009
Fall 2008		
Tschumi, Bernard Walker, Enrique	Lecture: "Acropolis Transcripts"	Nov 19, 2008
Cogdell, Christina	Workshop: "Avant-Garde Organicism: Unraveling the Rhetoric of Emergent Genetic Architecture"	Nov 18, 2008
Beauregard, Robert Irazàbal, Clara Marcuse, Peter Robbins, Bruce Wilson, Mabel	Public Housing / Public Sphere Panel 2: "In Defense of the Public Sphere"	Nov 12, 2008
Sachs, Jeffrey	Lecture: "Sustainable Urbanization in the 21st Century"	Nov 11, 2008
Bloom, Nicholas Frampton, Kenneth Plunz, Richard Venkatesh, Sudhir Wright, Gwendolyn	Public Housing / Public Sphere Panel 1: "In Defense of Public Housing"	Nov 10, 2008
Doctoroff, Daniel	Lecture: "Reflections on Six Years in City Hall"	Nov 5, 2008
Hadid, Zaha	Lecture: "Recent Work"	Oct 30, 2008
Ravindran, K.T.	Lecture: "Was the Master Plan to Blame?"	Oct 29, 2008

Coolidge, Matthew van Eyke, Jerry Koch, Leslie Pietrogrande, Paolo Sampson, David	Debate: "Zero State – E3*NY(Energy + Economy + Ecology)"	Oct 27, 2008
Anzalone, Phillip Haga, Sarah Lindsay, Bruce Martin, Reinhold Mesa, Nilda Orff, Kate Otero-Pailos, Jorge Park, Kyong Peterson, John Sclar, Elliott Srinivas, Smita Williams, Sarah Wigley, Mark Zola, Zoka	Alumni Conference "Ecogram: The Sustainability Question"	Oct 25, 2008
Frampton, Kenneth	Faculty Keynote Lecture "Ecogram: The Sustainability Question"	Oct 24, 2008
Andraos, Amale Wood, Daniel	Alumni Keynote Lecture "Ecogram: The Sustainability Question"	Oct 22, 2008
Addington, Michelle D. Despommier, Dickson Joachim, Michell Sinclair, Cameron Schuler, Matthias Theocharopoulou, Ioanna	Debate: "Eco-Craft: Design + Context + Innovation" "Ecogram: The Sustainability Question"	Oct 20, 2008
Levy, Aaron Menking, William Strum, Andrew	Debate: "Into the Open: Positioning Practice"	Oct 13, 2008
Welter, Volker	Workshop: "Between Catastrophe and Shangri-La: Sustainable Architecture"	Oct 9, 2008
Mori, Tosh ko	Lecture: "Pattern Culture Texture"	Oct 8, 2008
Mars, Neville Grima, Joseph Gutierrez, Laurent Johnson, Jeffrey Wang, Weijen	Debate: "Flash Urbanism: The Making of the Contemporary Chinese City"	Oct 6, 2008
Holl, Steven	Keynote Lecture: "Solid States: Changing Time for Concrete"	Oct 1, 2008
Pasnik, Mark Prudon, Theodore Rohan, Tim	Debate: "Concrete Realities: Preserving Modern Concrete Architecture"	Sept 29, 2008

Weiss, Norman		
Rubio-Hernandez, Rosana	Exhibition: Concrete Trajectories	Sept 29, 2008
Ma, Yansong	Lecture: "MAD in China"	Sept 24, 2008
Antonelli, Paola Lavin, Sylvia Spina, Marcelo Weil, Benjamin Zellner, Peter	Debate: "Matters of Sensation"	Sept 22, 2008
Cloepfil, Brad	Lecture: "Occupation"	Sept 17, 2008
Woods, Lebbeus	Lecture: "The Difficult, The Desirable"	Sept 8, 2008
Bell, Michael Bucci, Angelo, Casanova, Pascal Cohen, Jean-Louis Cohen, Preston Scott Comas, Carlos Eduardo Denari, Neil Ferrier, Jacques Frampton, Kenneth Graybeal, Benjamin Hawkinson, Laurie Herrors, Juan Kwinter, Sanford Lukasik, Jacques Ma, Quingyung Martin, Reinhold Menis, Fernando Mertins, Detlef Meyer, Christian Monteiro, Paulo Mori, Tosh ko Naaman, Antoine Nordenson, Guy Orff, Kate Picon, Antoine Reiser, Jesse Saitowitz, Stanley Schober, Hans Schuler, Matthias Seinuk, Ysrael Serraino, Pierluigi Shah, Surendra Sobek, Werner Tschumi, Bernard Umemoto, Nanako Wigley, Mark Wilson, Mabel	The Second Columbia Conference on Architecture, Engineering and Materials: "Solid States: Changing Time for Concrete"	Oct 2-3, 2008

SPRING 2008-FALL 2007

Spring 2008		
GSAPP	Exhibition: "End of Year Show"	May 15, 2008
Herzog, Jacques	Untitled Lecture	May 13, 2008
Eliasson, Olafur	"The Colors of the Brain Part I: Seminar"	May 9, 2008
Bergdoll, Barry Crary, Jonathan Das, Aniruddha Eagleman, David Eliasson, Olafur Holl, Steven Kim, Jeannie Shapley, Robert Sundaralingam, Prieeni Wigley, Mark	"The Colors of the Brain Part I: Conference"	Apr 19, 2008
Biesenbach, Klaus Bergdoll, Barry Eliasson, Olafur Marcoci, Roxana Wigley, Mark	"The Colors of the Brain Part I: Discussion"	Apr 18, 2008
Doctoroff, Dan	Lecture: "Reflections on Six Years in City Hall"	Apr 16, 2008
Adams, Constance	Lecture: "The Mothership Paradigm: Space Architecture and the Earth"	Apr 9, 2008
Müller, Lars Rock, Michael	Lecture: "Other Design"	Apr 7, 2008
Aureli, Pier Vittorio Boym, Svetlana Evenson, Brian O'Doherty, Brian Wallenstein, Sven-Olov Wark, McKenzie	Book Launch: *The FORuM Project*	Apr 5, 2008
Martin, Reinhold Rajchman, John Vidler, Anthony Wallenstein, Sven-Olov	Buell Lecture: "Biopolitics and the Emergence of Modern Architecture"	Apr 4, 2008
Tagliabue, Benedetta	Lecture: "Miralles Tagliabue, Work in Progress"	Apr 2, 2008
Armborst, Tobias Benjamin, David D'Oca, Daniel	Book Launch: *Patch Dynamics*	Mar 31, 2008

Svendsen, Erika Tang, Rennie Theodore, Georgeen Yang, Soo-in		
Hirsch, N kolaus	James Marston Fitch Lecture: "Material Time"	Mar 26, 2008
Lord, Chip Schreier, Curtis Scott, Felicity Wasiuta, Mark	Exhibition: *Ant Farm: Radical Hardware*	Mar 24, 2008
Mehrotra, Rahul	Lecture: "Architecture and Cultural Significance"	Mar 5, 2008
Clark, Mary Marshall Caldeira, Marta Caputo, Steven Erickson, Ansley Gyger, Helen Walker, Enrique	Panel: "Oral History as a Tool for Architectural Research: The Buell Oral History Prize"	Mar 3, 2008
Bartkowski, Frances Bogue, Ronald Bousfield, Ralph Catts, Oron Ingraham, Catherine Grosz, Elizabeth Kwinter, Sanford Lynn, Greg McNutt, J. Weldon	Conference: "Part Animal, Part Two: Architecture, the Arts, and Biological Life"	Feb 29, 2008
Frampton, Kenneth	Lecture and Book Launch: *Modern Architecture: A Critical History, 4th Edition*	Feb 28, 2008
Choi, Moongyu	Alumni Lecture: "Questioning the Border"	Feb 27, 2008
Vidler, Anthony	Lecture: "History and Theory in a 'Post-Critical' Age"	Feb 25, 2008
Herreros, Juan	Lecture: "Risky Business"	Feb 20, 2008
Dolkart, Andrew Martin, Reinhold Ockman, Joan Otero-Pailos, Jorge Scott, Felicity Wright, Gwendolyn	Debate and Book Launch: *USA: Modern Architectures in History*	Feb 18, 2008
Abbas, Ackbar Chang, Yung Ho Liu, Doreen Heng Ma, Qingyun	Symposium: "Exporting China"	Feb 16, 2008

Wigley, Mark		
Booker, Cory Pryor, Stefan	Lecture: "Newark–Development Opportunities and the Challenges for the New Newark"	Feb 13, 2008
Chu, Karl Kipnis, Jeffrey Martin, Reinhold Wigley, Mark	Debate: "New Paradigms in Architecture?"	Feb 11, 2008
Flood, Richard Inaba, Jeffrey Kay, Jamo Kay, Nick Wigley, Mark	Book Launch: *Volume 13: Ambition* Offsite: New Museum	Feb 7, 2008
Fitzgerald, Joan Sutton, Stacey	Lecture: "Building a Low-Carbon City: Continuum of Action"	Feb 6, 2008
Brauman, Rony Kurgan, Laura Marcuse, Peter Weizman, Eyal	Debate: "Planning Emergency: Urbanism for the Displaced?"	Feb 2, 2008
Roy, Lindy	Alumni Lecture: "Nervous Geometries and Other Matter"	Jan 30, 2008
Faustino, Didier Fiuza	Lecture: "(G)Host in the (S)Hell"	Jan 28, 2008
Fall 2007		
Maas, Winy	Untitled Lecture	Nov 28, 2007
Khan, Nathanial Venturi, James Walker, Enrique	Screening: Growing Up With Architects	Nov 26, 2007
Dutta, Arindam	Lecture: "Storm Clouds of the Nineteenth Century: Weather, Capital, Architecture"	Nov 14, 2007
Hays, K. Michael	Lecture Part II: "Architecture's Desire: Interpreting the 1970s Neo-Avant-Garde"	Nov 13, 2007
Hays, K. Michael	Lecture Part I: "Architecture's Desire: Interpreting the 1970s Neo-Avant-Garde"	Nov 12, 2007
Meredith, Michael Wasiuta, Mark	Discussion and Exhibition opening: "Vanishing Point"	Nov 8, 2007
Adjaye, David Golden, Thelma	Lecture: "Public Engagement, Private Retreats"	Nov 7, 2007

Cirugeda, Santiago	Lecture: "Social Architecture: The End of the Colored Cucumbers"	Oct 31, 2007
Baratloo, Mojdeh Burden, Amanda M. Glaisek, Christopher Plunz, Richard	Urban Design Debate: "(New) Model Cities: Designing in Green, Blue, Yellow, Orange and Red"	Oct 29, 2007
Alonso, Hernan Diaz	Young Alumni Lecture: "Pitch Black"	Oct 24, 2007
Frampton, Kenneth Lam, Elsa Martin, Reinhold McLeod, Mary Ockman, Joan Scott, Felicity Walters, Brad	Debate and Exhibition opening: Building Uncertainty: Unpacking the Shadrach Woods Archive	Oct 17, 2007
Baxi, Kadambari Fabricius, Daniela Kubo, Michael Martin, Reinhold Varnelis, Kazys	Debate and Book Launch: The City Unplugged	Oct 15, 2007
Neshat, Shirin	Lecture: "Women Without Men"	Oct 10, 2007
Allen, Stan Cohen, Preston Scott Keller, Ed Kipnis, Jeffrey Parker, Philip Webb, Michael	Debate: "Cut Action Micro Cut"	Oct 8, 2007
Wark, McKenzie	Buell Lecture: "50 Years of Recuperation: What is Living and What is Dead in the Situationist International"	Oct 3, 2007
Cadora, Eric Kurgan, Laura	Debate: "Million Dollar Blocks"	Oct 1, 2007
Addington, Michelle Bell, Michael Bicchiarelli, Roberto Burmeister, Albrecht Carpenter, James Colomina, Beatriz De Gobbi, Alberto Diller, Elizabeth Dodd, Graham Frampton, Kenneth Hawkinson, Laurie Heintges, Robert Henn, Gunter Holl, Steven Knaack, Ulrich Laufs, Wilfried Marble, Scott	Conference: "Engineered Transparency: Glass in Architecture and Structural Engineering"	Sept 27, 2007

Martin, Reinhold Mertins, Detlef Meyer, Christian Nordenson, Guy Norville, Scott Ockman, Joan Oki, Toshihiro Picon, Antoine Rexroth, Susanne Richardson, Tom Roche, Francois Schlaich, Jörg Schneider, Jens Schuler, Matthias Schober, Hans Smilowitz, Robert Sobek, Werner Tomasetti, Richard Tschumi, Bernard Weller, Bernhard Wigley, Mark		
Sejima, Kazuyo	Keynote Lecture for "Engineered Transparency: Glass in Architecture and Structural Engineering"	Sept 26, 2007
Anzalone, Phillip Biccchiarelli, Roberto Hoberman, Chuck Massie, William E.	Debate: "Making the Radical"	Sept 24, 2007
Rubio-Hernandez, Rosana	Exhibtion: Through Glass	Sept 24, 2007
Hardt, Michael	Lecture: "Multitude and Metropolis"	Sept 19, 2007
Hogan, Pamela Rosenberg, Tamara	Screening: The Sand Castle	Sept 17, 2007
Goulthorpe, Mark	Lecture: "The Possibility of (an) Architecture"	Sept 12, 2007
Baxi, Kadambari Cheng, Irene Frampton, Kenneth Shamir, Adi Spitz, Rene	Debate: "Politics, Publics and Design"	Sept 10, 2007
Abe, Hitoshi	Lecture: "Architecture from Boundary Surfaces"	Sept 5, 2007

APPENDIX 5: Exhibitions

Director of Exhibitions
Mark Wasiuta

The exhibition program at GSAPP conceives, curates, and designs several echibitions each year. GSAPP exhibitions provide a platform for developing original research projects and for experiments withi the spatial distribution and visual organization of research material. The program also serves as an invaluable pedagogical extension of the curriculum, providing students with the opportunity to listen and engage various experts from around the world on issues that are and will define the future of architectural discourse and practice. .

Through a series of exhibitions over the last several years GSAPP exhibitions has extended *The Living Archive*, a research program that examines and exhibits critical and under-studied architectural archives of the postwar era. Some of these exhibitions have begun to travel internationally. For example, *Environments and Counter Environments: Experimental Media in "Italy: The New Domestic Landscape," MoMA, 1972*, has been shown at the Swiss Architecture Museum in Basel, the Disseny Hub in Barcelona, the Arkitekturmuseet in Stockholm and will travel to the Graham Foundation in Chicago. The exhibition has subsequently sponsored a book on the same topic that will be published in the spring of 2013.

Another series of exhibitions has emerged from the *Global Experiments in Art and Architecture* program. These exhibitions focus on contemporary artists whose work touches on the boundaries between art and architecture, and whose presence in the gallery and in the School serve as provocations to the discipline, and as productive sources of alternate forms of research, representation and spatial practice. One exhibition in this series*, Dan Graham's New Jersey*, was developed into a book project that was published by Lars Müller Press in Fall 2011.

Greater visibility and impact outside the School is matched by an increased importance within the culture and pedagogy of GSAPP. The exhibitions program yearly hires two exhibitions assistants and a regular exhibitions crew of students from the M. Arch student body, who work closely with the director planning installations and producing exhibitions. These students are provided a strong introduction to curating practices and to the various skills required to mount an architectural exhibition. GSAPP Exhibitions also employs at least one student from the CCCP program to assist with exhibition research and with the formulation of new projects. Indeed, the gallery has a strong link with the CCCP program, for which it provides a prompt for the analysis and discussion of exhibition practice within the School and within the field.

The following list indicates the major exhibitions of the last several years, and those in production for the coming academic year. Unless otherwise noted all exhibitions were designed and produced by GSAPP Exhibitions.

Spring 2013
Love and Gravity: Buckminster Fuller's World Game. Arthur Ross Architecture Gallery. Curated by Mark Wasiuta.
Tony Oursler's Atlas. Arthur Ross Architecture Gallery. Curated by Branden Joseph and Mark Wasiuta.

Fall 2012
No Longer Art: The Salvage Art Institute. Arthur Ross Architecture Gallery. Produced by Elka Krajewska and GSAPP Exhibitions. Curated by Elka Krajewska and Mark Wasiuta.

Summer 2012

Collecting Architecture Territories. Produced with GSAPP students for the Deste Foundation in Athens, Greece. Curated by Craig Buckley and Mark Wasiuta.

Spring 2012
Native States of America. Lakota Housing, Infrastructure & Economy. Avery Hall. Produced by GSAPP Exhibitions and Annie Coombs and Zoe Malliaros. Curated and designed by Annie Coombs and Zoe Malliaros.
Yoshiko Sato. 1960-2012. Avery Hall. Produced by GSAPP Exhibitions and Michael Morris. Curated and designed by Michael Morris.
Japan: Disaster and Recovery. Avery Hall*.* Produced by GSAPP Exhibitions and Joseph Justus. Curated by Joseph Justus and Kunio Kudo.

Fall 2011
Public Matters: New York Architecture After 9/11. Avery Hall. Produced by GSAPP Exhibitions and the Temple Hoyne Buell Center for the Study of American Architecture. Curated by Reinhold Martin and Anna Kennof.
Here Now. Avery Hall. Produced by GSAPP Exhibitions and Sarah Williams. Curated and designed by Sarah Williams.

Spring 2011
Mikael Olsson: Södrakull Frösakull. Arthur Ross Architecture Gallery. Curated by Mark Wasiuta.
Prototype 180º: Mary Ellen Carroll. Arthur Ross Architecture Gallery. Curated by Mark Wasiuta.

Spring 2010
Operators' Exercises. Open Form Film and Architecture. Arthur Ross Architecture Gallery. Curated by Lukasz Ronduda and Mark Wasiuta.
Framed Transformations. Avery Hall. Produced by GSAPP exhibitions and GSAPP Slide Library. Curated by Lisa Ekle and Robin Fitzgerald-Green.

Fall 2009
Martin Beck. Panel 2: "Nothing Better than a Touch of Ecology and Catastrophe to unite the social classes…" Arthur Ross Gallery. Designed by Martin Beck. Curated by Mark Wasiuta.

Spring 2009
Environments and Counter Environments: Experimental Media in "Italy: The New Domestic Landscape," MoMA, 1972. Arthur Ross Gallery. Curated by Mark Wasiuta, Peter Lang and Luca Molinari.
New Soviet People Will Conquer Cosmic Space. Avery Hall. Curated by Deane Simpson and Mark Wasiuta. Designed by Deane Simpson.
Perret and Le Corbusier: A Dialogue in Reinforced Concrete. Avery Hall. Curated by Liane Hancock.

Fall 2008
Utopia's Ghost: Postmodernism Reconsidered. Arthur Ross Architecture Gallery. Curated by Reinhold Martin.
Concrete Trajectories. Avery Hall. Curated and designed by Rosana Rubio-Hernández.
Ecology Design Synergy. Behnisch Architekten and Transsolar Climate Engineering. Arthur Ross Architecture Gallery. Curated and Produced by Franck Ockert.
Architecture and Revolution, Pavillon des Temps Nouveaux. Avery Hall. Curated by Ivan Shumkov.

Spring 2008
Ant Farm: Radical Hardware. Arthur Ross Architecture Gallery. Curated by Felicity Scott and Mark Wasiuta.
Michael Meredith: Glimmering Noise. Avery Hall. Curated by Mark Wasiuta.

Colors of your Brain. Avery Hall. Curated and designed by Jeannie Kim and Troy Therrien.

Fall 2007
Build in Uncertainty: Unpacking the Shadrach Woods Archive. Arthur Ross Architecture Gallery. Curated by Elsa Lam and Brad Walters.
Through Glass. Avery Hall. Curated and designed by Rosana Rubio-Hernández.

Spring 2007
Dan Graham's New Jersey. Arthur Ross Architecture Gallery. Curated by Mark Wasiuta.
Terraswarm: Color Shift. Avery Hall. Curated by Mark Wasiuta.

Fall 2006
Anthony McCall: Four Projected Movements. Arthur Ross Architecture Gallery. Curated by Mark Wasiuta.
Mark Lewis: Tilt, Pan, Dolly, Zoom. Arthur Ross Architecture Gallery. Curated by Mark Wasiuta.

APPENDIX 6: Publications

Craig Buckley, Director

The books published through the Office of Print Publications at GSAPP can be seen as the most enduring recoreds of the School's intellectual life. The magazines and journals produced at GSAPP, while more ephemeral, get closer to the actual rhythm of conversation and dialogue within the School. And yet, even in ther diversity, the School's books and magazines capture only a small fraction of what occurs at GSAPP. While remaining committed to both of thise formats, the Office of Publications is broadening its notion of print, redeveloping the publications website as a platform and hub capable of responding to the different speeds and formats of the contemporary publishing landscape, from the printed books, to the PDF, print-on-demand, and eventually, e-book formats.

Forthcoming in 2013

Environments + Counter Environments: Experimental Media in the New Domestic Landscape
Authors: Craig Buckley, Peter Lang, Luca Molinari, and Mark Wasiuta
Edited by: Craig Buckley and Mark Wasiuta
Spring 2013
GSAPP + ACTAR
Designed by ACTAR
ISBN: 978-1-883584-85-6

Collecting Architecture Territories
Edited by Craig Buckley and Mark Wasiuta with Momo Araki, Adam Bandler, Jordan Carver, Jard Dignaci, Farzin Lotfi-Jam, Jess Ngan, Marina Otero-Verzier, and Troy Therrien.
Spring 2013
GSAPP+DESTE+Artbook/DAP
Designed by MTWTF
ISBN: 978-1-883584-78-8

Giulio Carlo Argan: The Crisis of Values
Edited by Cesare Birignani
Spring 2013
GSAPP+Artbook/DAP
Designed by Geoff Han
ISBN: 978-1-883584-76-4

After the Manifesto
Edited by Craig Buckley
Spring 2013
GSAPP+Artbook/DAP
ISBN: 978-1-883584-87-0

Hermitage, 2014
Paul S. Byard Memorial Lecture
Author: Rem Koolhass
Edited by Jeannie Kim
Spring 2013
Designed by Bruce Mau
ISBN: 978-1-883584-74-0

The China Lab Guide to Megablock Urbanisms
Edited by Cressica Brazier, Jeffrey Johnson, and Tat Lam
Spring 2013
GSAPP+ACTAR, Fall 2013
Designed by 2x4
ISBN: 978-1-883584-86-3

Promiscous Encounters
Edited by Francisco Diaz, Nina Valerie Kolowratnik, Marcelo Lopez-Dinardi and Marina Otero Verzier
GSAPP, Fall 2013
ISBN: 978-1-883584-87-0

Permanent Change: Plastics in Architecture and Engineering
Edited by Michael Bell and Craig Buckley
Fall 2013
GSAPP+Princeton Architectural Press
Designed by Jan Haux
ISBN: 978-1-61689-166-4

2012

Global Topologies: Converging Territories
Edited by Mario Gooden
Fall 2012
GSAPP Print-On-Demand
Designed by Mario Gooden
171 pages, paperback
ISBN: 978-1-883584-72-6

Ludwig Hilberseimer: Metropolisarchitecture
Edited by Richard Anderson, Afterword by Pier Vittorio Aureli
Fall 2012
GSAPP Books +Artbook/DAP
Designed by Geoff Han
366 pages, paperback
ISBN: 978-1-883584-75-7
592

Re-Cultivating The Garden City of Kumasi
Edited by Clara Goitia, Johannes Pointi, Richard Plunz, Geeta Mehta, Susan Blaustein
Fall 2012
GSAPP Urban Design Program + Urban Design Lab at the Earth Institute
ISBN: 978-0-9822174-3-6

Five North American Architects: An Anthology by Kenneth Frampton
Author: Kenneth Frampton
GSAPP+Lars Muller Publishers, 2012
Designed by Integral Lars Muller
ISBN: 978-3-03778-256-9

Dan Graham's New Jersey
Edited by Craig Buckley and Mark Wasiuta
GSAPP+Lars Muller Publishers, 2012
Designed by Integral Lars Muller
ISBN: 978-3-03778-259-0

Abstract 2010-2011
Editor: Scott Marble
Assistant Editors: Jordan Carver and Jason Roberts
Photographers: Rachel Hillery and Lindsay Kunz
GSAPP, 2012
Designed by Sagmeister Inc.
ISBN: 978-1-883584-73-3

Post-Ductility: Metals in Architecture and Engineering
Edited by Michael Bell and Craig Buckley
GSAPP+Princeton Architectural Press, 2012
Designed by Jan Haux
ISBN: 978-1-61689-046-9

Volume 32: Centers Adrift
Edited by Arjen Oosterman
Archis+AMO+GSAPP C-LAB
Archis Publishers, 2012
Designed by Irma Boom and Sonja Halter
ISBN: 978-90-77966-327

Volume 31: Guilt Landscapes
Edited by Arjen Oosterman, Liam Young, and Kate Davies
Archis+AMO+GSAPP C-LAB
Archis Publishers, 2012
Designed by Irma Boom and Sonja Halter

ISBN: 978-90-779966-310

2011

Volume 30: Privatize!
Edited by Arjen Oosterman
Trust Design, #4: Public Private
Archis+AMO+GSAPP C-LAB
Archis Publishers, 2011
Designed by Irma Boom and Sonja Halter
ISBN: 978-90-77966-30-3

The Expendable Reader: Articles on Art, Architecture, Design, and Media, 1951-1979
Author: John McHale
Edited by Alex Kitnick
Afterword by Mark Wigley
Series editor: Craig Buckley
GSAPP Books, 2011
Designed by Geoff Han
ISBN: 978-1-883584-70-2

Potlatch 2: A Journal of the Potlatch Lab, GSAPP
Directed by Yehuda E. Saftan
Edited by: Cristobal Amunatequi
GSAPP, 2011
ISBN: 2156-4906

CC: A Global Report from Columbia University GSAPP
Edited by Jeannie Kim
GSAPP, 2011
Designed by 2x4

Architects' Journeys: Building, Traveling, Thinking
Edited by Craig Buckley and Pollyanna Rhee
GSAPP Books + T6) Ediciones, 2011
Designed by Project Projects
ISBN: 978-1-883584-66-5

Erieta Attali: In Extremis: Landscape into Architecture
GSAPP +DAP, 2011
Designed by HvA Design
ISBN: 978-1-883584-66-5

Volume 29: The Urban Conspiracy

Edited by Jeffrey Inaba and C-LAB
Archis Publishers, 2011
Designed by Irma Boom and Sonja Halter
ISBN: 978-90-77966-29-7

Volume 28: The Internet of Things
Edited by Arjen Oosterman
Archis + AMO +GSAPP C-LAB, 2011
Archis Publishers, 2011
Designed by Irma Boom and Sonja Halter
ISBN: 978-90-77966-80

Volume 27: Aging
Edited by Arjen Oosterman
Archis + AMO +GSAPP C-LAB, 2011
Archis Publishers, 2011
Designed by Irma Boom and Sonja Halter
ISBN: 978-90-77966-273

Volume 26: The Architecture of Peace
Edited by Arjen Oosterman
Archis + AMO +GSAPP C-LAB, 2011
Archis Publishers, 2011
Designed by Irma Boom and Sonja Halter
ISBN: 978-90-77966-266

The Studio-X New York Guide to Liberating New Forms of Conversation
Edited by Gavin Browning
Afterword by Mark Wigley
GSAPP + DAP, 2011
Designed by MTWTF
ISBN: 978-1-883584-65-8

2010

Volume 25: Getting There, Being There
Edited by Arjen Oosterman
Archis + AMO +GSAPP C-LAB, 2010
Archis Publishers, 2010
Designed by Irma Boom and Sonja Halter
ISBN: 978-90-77966-259

Volume 24: Counterculture
Edited by Jeffrey Inaba + C-Lab
Archis + AMO +GSAPP C-Lab, 2010
595

Archis Publishers, 2010
Designed by Irma Boom and Sonja Halter
ISBN: 978-90-77966-242

Volume 23: Al Manakh Cont'd
Edited by Todd Reisz + Rem Koolhaas
Archis + AMO +GSAPP C-LAB, 2010
Archis Publishers, 2011
Designed by Irma Boom and Sonja Halter
ISBN: 978-90-77966-235

2009

Engineered Transparency: The Technical, Visual, and Spatial Effects of Glass
Edited by Michael Bell + Jeannie Kim
GSAPP + Princeton Architectural Press, 2009
ISBN: 978-1-56898-798-9

Emerging Urban Futures in Land Water Infrastructure: South East Queensland
Edited by Mojdeh Baratloo + Kathi Holt-Damant
GSAPP, 2009
ISBN: 978-1-883584-57-3

Spain on Spain: Debates on Contemporary Architecture
Edited by Jorge Otero-Pailos
GSAPP+Editorial Rueda, 2009
ISBN: 978-84-7207-193-3

Mumbai Dharavi: Scenarios for Development
Edited by Michael Conard, Geeta Mehta, Kate Orff, and Marielly Casanova
GSAPP, 2009
IBSN: 978-1-883584-59-7

2008

Building on Templo Mayor: Design with Historic Architecture
Edited by James Wei Ke
GSAPP, 2008
ISBN: 978-1-883584-54-2

Constructive Practices: Between Economy and Desire
Edited by Kathryn Dean

GSAPP, 2008
ISBN: 978-1-883584-53-5

Ant Farm: Allegorical Time Warp: The Media Fallout of July 21, 1969
Author: Felicity Scott
GSAPP+ACTAR + Berkeley Art Museum, 2008
ISBN: 978-84-96954-24-3

APPENDIX 7: Materials Conferences

http://www.arch.columbia.edu/naab2012/Materials-Conference-Concrete.pdf

http://www.arch.columbia.edu/naab2012/Materials-Conference-Glass.pdf

http://www.arch.columbia.edu/naab2012/Materials-Conference-Metals.pdf

http://www.arch.columbia.edu/naab2012/Materials-Conference-Plastics.pdf

APPENDIX 8: Research Labs

Laboratory for Applied Building Science

Phillip Anzalone, Director

The invariable ability of students to question both the theoretical implications and practical applications of digital design has been a critical mechanism in keeping the research at the Avery Digital Fabrication Lab not just current – but ahead of its time. Industry has finally seen a shift towards CNC fabrication becoming more widely accepted and implemented, for reasons of both aesthetics and efficiency, while Building Information Modeling has concurrently grown as one of the most widely used instruments of digital design, both in academia and in practice. Within the academic realm, Columbia students have continued to challenge the given methodologies of software in order to apply digital tools to their research, rather than the reverse. The integration of CNC fabrication into parametric modeling, BIM and other organizational hierarchies has challenged working models of fabrication at the scale of the prototype as well as the building, offering a level of complexity and specificity thought to be impossible until recent years.

The shift toward more expansive forms of digital production within the design and construction industry affords opportunities to not only reconfigure the relationships between the key players, but also incorporate industry sectors not typically associated with building construction. At the core of this shift is the integration of communication through various forms of digital networks, CNC fabrication being just one among many, with the ambition of developing a comprehensive, well organized, easily accessible, and parametrically adaptable body of information that coordinates the process from design through a building's lifecycle. CNC technologies afford the architect an opportunity to strategically reposition design within the fabrication and construction processes; not only have the products of the architect—until recently, only drawings—become highly specific 3-dimensional representations, but because of the hierarchical assignment of parameters, the design itself has remained malleable until fabrication commences.

China Megacities Lab

Jeffrey Johnson, Director

Mission:

Over the next 25 years, it is projected that China will account for 50% of the world's new construction. The majority of this construction will occur in existing cities, or newly formed urban areas. It is the mission of the China Megacities Lab to become actively engaged with this rapid urbanization and spatial production occurring in China, through both research and design. By forming strategic collaborative relationships with institutions, private practitioners, developers, governments, etc., we intend to cultivate a productive exchange that has the potential to yield unpredictable and vital outcomes that will provide alternative urban strategies for the increasingly urbanized world.

Methodology:

The lab will operate as both a research laboratory and a design studio, considering urban projects located throughout mainland China and Hong Kong. All projects will be conceived with a methodology that blends the academic (critical) and the practical (pragmatic), yielding unpredictable and vital outcomes that possess the potential of realization.

Aim:

The aim of the lab's engagement with China is three-fold:

1 Conduct research and propose design solutions for diverse urban projects throughout China.

2 Cultivate productive exchanges with Chinese institutions, governments, private enterprises, practitioners, etc.

3 Develop of a new species of architect and urban designer able to operate and maneuver at an ever-accelerating pace and with maximum flexibility.

Urban Design Lab
Richard Plunz, Director

The Urban Design Lab is a joint laboratory of the Earth Institute and the Graduate School of Architecture, Planning and Preservation (GSAPP). It was created in 2006 to address the need for a design-based approach to shaping the long-range future of sustainable urbanism. New York City and its regional context is viewed as a core model for solving problems related to sustainable urban futures everywhere, including Latin America, Asia, Africa, and Europe.
The Lab's work cuts across all of the Earth Institute's themes: Climate and Society, Water, Energy, Poverty, Ecosystems, Global Health, Food, Ecology, Nutrition, Hazards and Risk, and Urbanization.

The UDL's collaborators are academics and professionals in urban design, planning, architecture, historic preservation, real estate, public health, environmental science, climatology, engineering, ecology, education, business, economics, social science, humanities, and law.
In only two years, the UDL has assisted New York City communities in tackling environmental remediation, high-performance and green building design, micro-infrastructure, public health, climate change, and sustainable economic development.

Living Architecture Lab
David Benjamin, Director

Political and cultural conditions change: what if the walls and windows morphed in response? Air and water quality fluctuate: what if a cloud of light above the river modulated its color as a public display of contamination? Demands for occupation of space shift across days, seasons, and years: what if traditionally mute and inert building materials appeared and disappeared accordingly?

A dynamic world calls for responsiveness. Responsiveness in architecture calls for new systems. New and untested systems call for full-scale prototyping.

The Living Architecture Lab experiments with new systems and adaptive technologies through open source, collaborative, hands-on design. The Lab aims both to make visible the invisible forces that shape our world, and to explore the potential for architecture to transform in real time based on these forces.

Each of the Lab's projects involves components for input, processing, and output. The components are upgradeable and swappable, and they range from off-the-shelf products to built-from-scratch elements. The goal is to integrate components into full-scale, functioning prototypes, and to apply new technologies and new forms of responsiveness to social and cultural issues.

Yet each project is a beginning rather than an end. Alternative components can be tested and new components integrated.

On a larger scale, the projects are designed as swappable modules in new and existing buildings. Modules can be upgraded without replacing the entire building.

With future development in mind, the Lab publishes source code, circuit diagrams, and assembly

instructions. Emphasizing open-ended exploration, the Lab positions its projects as part of larger trajectories of design and construction, borrowing from the discoveries and technologies of others and also making its own findings and prototypes available for re-use and further development.

Conservation Laboratory

George Wheeler, Director

The Historic Preservation Program in the Graduate School of Architecture, Planning and Preservation was the first to offer formal training in architectural conservation in the United States. This training and the associated course work began in 1977 and by 1982 the conservation laboratory was established on the 6th floor of Schermerhorn Extension. Today, the laboratory comprises approximately 1800 square feet that is used for lectures, demonstrations, and other typical teaching laboratory activities that support thesis and independent research and course work. In addition to the usual laboratory supplies and equipment such as deionized water supply, glassware, chemical reagents, etc., a wide range of equipment is housed and used in the laboratory and offsite including a Philips 1835 x-ray diffraction unit, Nikon and Zeiss polarizing light and stereo binocular microscopes with Infinity digital camera, X-Rite Spectrophotometer (colorimeter), INSTRON 4201 mechanical analyzer, multiple Onset T/RH dataloggers, and Accumet pH and conductivity meters. In addition, the laboratory all houses some of the most complete and extensive historic collections of brick, sand, terra cotta, and wood samples and a truly unique set of collections of stone samples dating back to the 19th century. These collections and facilities by close associations with the School of Engineering at Columbia University, the Conservation Center at New York University, and both the Objects Conservation Department and the Department of Scientific Research at the Metropolitan Museum of Art. These associations provide additional equipment for teaching and research such as a wider array of mechanical testing equipment, scanning electron microscopy, Fourier transform infrared spectroscopy, portable and stationary x-ray fluorescence, and infrared thermography.

Dr. George Wheeler, Director of Conservation, heads the largest and most experienced architectural conservation faculty in the United States and this faculty delivers a deep a broad curriculum of courses in conservation. The program is unique among graduate programs in offering stand-alone courses in the conservation of historic concrete and in the preservation of modern architecture. Finally, in recent years students have produced fundamentally important thesis research that has contributed to the body of knowledge in the field of conservation (see below).

Faculty and Courses

Full Time Faculty
George Wheeler

Adjunct Faculty

Norman Weiss	Concrete, Cast Stone, Mortar; Brick, Terra Cotta, Stone; Basic Conservation Science
Richard Pieper	Architectural Metals
Mary Jablonski	Conservation Workshop; American Architectural Finishes
Helen Haney-Thomas	Conservation Workshop
Joan Berkowitz	Concrete, Cast Stone, Mortar
Pamela Jerome	Archaeological Site Management
Theo Prudon	Preservation of Modern Architecture; Structures, Systems and Materials
John Childs	Architectural Wood
Dan Allen	Brick, Terra Cotta, Stone
Chris Gembinski	Structures, Systems and Materials
Julie Sloan	Conservation of Stained Glass

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Michael Lynch Historic Architectural Hardware
Robert Silman Philosophy of Technology

Technological Change Lab
Smita Srinivas, Director
TCLab is a Columbia University-based research and advisory program focused on economic change and especially industrial development and innovation. The lab is directed by Prof. Smita Srinivas of the Urban Planning program. It is housed at the Graduate School of Architecture, Planning and Preservation (GSAPP) at Columbia University.

The intellectual focus of TCLab is in understanding (a) the characteristics of economic and technological change, and especially industrial transformation of countries, cities and regions and (b) the conditions under which considerations of efficiency and equity can evolve alongside.

The advisory board consists of eminent scholars and practitioners concerned with international economic development planning and labour issues. They include:

Prof. Lourdes Beneria (Cornell), Prof. Martha Chen (Harvard), Prof. Jorge Katz (University of Chile), Prof. Richard Lester (MIT), Prof. Richard Nelson (Columbia), Prof. Michael Piore (MIT), Prof. Bishwapriya Sanyal (MIT), Prof. Elliott Sclar (Columbia), Mr. R.K.A. Subrahmanya (Social Security Association, India), Prof. Judith Sutz (Universidad de la Republica, Uruguay).

The Community & Capital Action Research Lab (C2ARL)
Stacey Sutton. Director

The Community & Capital Action Research Lab (C2ARL) provides an infrastructure for cutting-edge research, critical discourse, and empirically informed practice on fundamental questions related to the incessant tension between the needs of community and the imperatives of capital.

C2ARL seeks to draw upon and facilitate collaborations among interdisciplinary urban scholars and graduate students concerned with equitable redevelopment, community economic development, commercial revitalization, civic engagement, community benefit agreements, ethno-racial stratification and spatial visioning.

C2ARL understands that social and cultural interests of community, as well as the economic interests of capital, get reconstituted over time and across urban geographies. Nevertheless, C2ARL seeks to better understand: Resource distribution across urban spaces and social groups, or who gets what, when, where and why?; The daunting challenges facing ethno-racial and low-income urban communities and the potential for collective action; and Neighborhood entrepreneurship as a dynamic and multifaceted enterprise that often occupies a precarious middle-ground between Community and Capital.

C2ARL aims to support theoretically sophisticated planning and policy analyses that seek to reveal power asymmetries and propose planning and decision-making processes that lend themselves to the production of more equitable outcomes.

Latin Lab: The Latin American and Caribbean Laboratory
Clara Irazabal Zurita. Ph.D., Director

Latin Lab seeks to become a leading laboratory for the study of the interrelated dynamics of the built environment and community development in LAC and its diasporas and a premier resource to assist in their just transformations.

Mission

The Latin Lab serves as an intellectual platform for all the research, pedagogical, and service initiatives undertaken by GSAPP community related to Latin America and the Caribbean (LAC). It explores the complex and fluid dynamics of urban development in LAC. Rather than approach LAC as a homogeneous super-region, the Lab examines and understands LAC as a fluxing cosmology of multi-scalar urban and rural settlements and (de/re)territorialized diasporas around the world, a palimpsest of layered identities, each with glocal dimensions resilient to simplification and regionalization.

The Latin Lab explores the unique characteristics of rural, urban, and peri-urban development in LAC, which is often marked by jarring socio-spatial divides. It pursues experimental design and research projects in the areas of architectural and urban design, urban planning, historic preservation, and real estate development. These projects address complex, contemporary developments in Latin and Caribbean communities, and foster cutting edge explorations framed by the issues of cultural and spatial identity, migration, and living standards. The Latin Lab aims to establish a permanent space for research, service, and pedagogical exploration about LAC settlements and cultures. Its initiatives aim to reinforce cross-disciplinary dialogues within and beyond GSAPP's community that critically analyze the impact of current and future developments in LAC through symposiums, conferences, exhibitions, design proposals, research projects, and site-based coursework. The Lab establishes collaborative relationships with academic and professional individuals and institutions, government agencies, and NGOs to build effective tools for the improvement of LAC settlements through focused analyses and proposals.

Research Themes

· LAC diasporas in New York City, other US cities, and around the world
· Public space
· Sustainable and equitable planning and design
· Inclusive planning and design processes
· Political and socio-cultural city analyses
· City image-, identity-, and place-making processes

Columbia Laboratory of Architectural Broadcasting (C-lab)

Jeffrey Inaba, Director

Architectural publication has to be subjected to the same logic of experimentation as the projects it presents. The Columbia Laboratory of Architectural Broadcasting (C-LAB) applies the experimental research model of the design studio to the mechanisms of publication, refusing any clear distinction between medium and message. If the nature of the architect and design is changing radically, so too must the means of circulating architectural ideas. Architects don't simply draw and then communicate through this or that channel. They draw with the communication channels themselves.

The mission of CLAB is to test experimental forms of architectural communication. Rethinking architecture at a global scale, the lab sets up creative partnerships to broaden the range and increase the intensity of architectural discourse—launching unique documents, series, provisional networks, special issues, video streams, television, radio and webcasts. The lab acts as a kind of training camp and energy source for incubating new channels for debate about architecture.

Nonlinear Solutions Unit: Transfer of Methodology from the Science of Complexity to

Architecture

Caterina Tiazzoldi and Christopher Whitelaw, Co-directors

Our intention is to develop a new sensibility in the design approach that would lead to the architect's heightened control of an increasing level of complexity in the design process. We propose to do this by transferring the methodologies employed by other branches of science to engage problems of complexity.

The Nonlinear Solutions Unit constitutes an interdisciplinary network both for academic research and for the implementation of non-linear devices in design and construction. The unit is articulated into two interdependent parallel sections. The first section aims to create a broad interdisciplinary vision, which will theoretically frame and quantitatively direct the experimentation of the second section by actively engaging researchers and professionals that are already employing these tools in their fields.

This second section, by means of concrete case studies taken from existing problems in architecture, verifies the validity of the methodological hypothesis proposed by the first section and consequently evaluates which tools have the capacity to respond to the problems which arise in the architectural domain of formal, managerial, structural and/or building nature. Our interest is to embed in the modelling process sets of constraints that affect the decision-making processes of the designer.

In the first year we have begun exploring, through the use of responsive devices, the capacity of architecture to answer to specific environmental requirements with its adaptable physicality. The goal of the projects was to investigate the possibilities that will be opened up by the modulation between the combinatory potentialities of the different performance criteria with their design intentionality. Responsive Devices unfold sets of formal solutions through rule-based modelling and programming. The projects were supported by the researched developed in the context of the Santa Fe Institute and by the collaboration with other professional and academics from outside of the School.

Spatial Information Design Lab

Laura Kurgan and Sarah Williams, Co-directors

The Spatial Information Design Lab is a think- and action-tank at Columbia University specializing in the visual display of spatial information about contemporary cities and events. The lab works with vast quantities of statistical and other numeric data about space—combined with narratives and images to design compelling visual presentations about our world today. The projects in the lab focus on linking social data with geography to help researchers and advocates communicate information clearly, responsibly, and provocatively. We work with survey and census data, Global Positioning System information, maps, high- and low-resolution satellite imagery, analytic graphics, photographs and drawings, along with narratives and qualitative interpretations, to produce images.

By reorganizing tabular data using unique visualization techniques, and locating it geographically, we try to correlate disparate items of information and picture the patterns and networks they create. Putting data on a map can open new spaces for action, and new options for intervention, as the often-unseen shapes and forms of life in the city becomes visible. Design, here, is less like a tool and more like a language, a practice that shapes the outcomes and understandings of the things we do. It is not simply an aesthetic prejudice. The words and pictures we choose make a difference to the way people, including us, imagine their own possibilities of responding to what we say and do.

Through partnerships with people and organizations inside and outside of the University, our independent and rigorous research thrives in the academic setting of open inquiry,

experimentation, and risk-taking, in order to expand the ways in which data is collected, used, and presented. The Spatial Information Design Lab was created in 2004, as part of a campus-wide Geographic Information Systems (GIS) initiative, to create documentation (metadata) and a new interface for the GSAPP's growing archive of spatial data.

The Lab's first major project has been "Graphical Innovation in Justice Mapping," an exploration of the territory of incarceration in seven U.S. cities, organized in collaboration with the Justice Mapping Center. Growing out of that project have been collaborations with Common Ground on homelessness in Brownsville (Brooklyn), with Sudhir Venkatesh (Sociology) to document the lives of recently-released former prisoners in New York City, and with the Civic Justice Corps and a variety of governmental and non-governmental agencies to create a neighborhood revitalization plan in the Seventh Ward of New Orleans.

The Lab's work on New Orleans extends into GSAPP coursework through our collaboration with two design studios (Laurie Hawkinson, Scott Marble) and a seminar about New Orleans, taught by Laura Kurgan. The Lab also worked with David Abramson at Columbia's Mailman School of Public Health to visualize health surveys made of temporary housing after Hurricane Katrina.

SIDL's work on criminal justice and cities is the focus of "Architecture and Justice," a September 2006 exhibition at the Architectural League of New York. The event also includes a scenario-planning workshop focusing on Brownsville, bringing together community groups, state and city agencies, architects, urban planners, artists and scholars.

The Lab's newest projects include consulting with New York City's 311 call center to visualize their data, and a collaboration with GSAPP's Landscape Lab to create social, historical, habitat, and ecological mapping which will be used as a vision plan for Gateway National Park.

Urban Landscape Research Lab
Kate Orff, Director
Janette Kim, Co-Director

The Urban Landscape Research Lab is an interdisciplinary group that focuses on the role of design in the analysis and transformation of the joint built-natural environment, and study ecological processes and urban systems as hybrid phenomenon through targeted pilot projects, practical strategies, and experiments. This landscape/ecology-based approach to urbanism brings together a wide range of disciplines such as architecture, landscape architecture, urban design, preservation, civil engineering, conservation biology, economics, climate, and public health, to focus on specific environment & development issues as they relate to built form.

Our teaching and research interests share common objectives: to effect positive change in the urban landscape in terms of biodiversity, climate change, water quality and access, waste and sanitation. We focus on the physical design of infrastructures, landscapes, and dense urban fabrics as change agents. A parallel goal is to evolve the design disciplines at the GSAPP in response to current environmental contexts and technologies, and to marshal the design expertise of the School toward the engagement of policy makers and the public in the reshaping of the 21st century urban landscape.

The research lab is based in a collaborative, interdisciplinary working model that involves prototyping, feedback, and ongoing monitoring efforts. Issues are explored through joint interdisciplinary studio formats and through funded research projects in partnership with scientists, government agencies, and community activists. In October 2010, Columbia's Urban Landscape Lab—led by Janette Kim and Erik Carver, with support from the Van Alen Institute—held the Underdome Sessions symposia and launched an online guide, theunderdome.net. The

project mapped contending energy agendas to start a new conversation on architecture's agency within political ecology.

The Underdome Handbook builds on and extends this work. It reveals debates between policy makers, economists, historians, and engineers; commissions editorials from symposia moderators Reinhold Martin, Jonathan Massey, Michael Osman, and Georgeen Theodore; and constructs a taxonomy of strategies around power, territory, lifestyle, and risk. The agendas that have emerged are tested in contemporary design practice through twenty case-study articles. The guide becomes a critical nexus: not only a document of unique conversations about priorities in the face of energy imperatives, but also a playbook influencing practice and future public programs.

More recently, The Urban Landscape Lab, led by Janette Kim, created a research report, phased master plan for public greenways, and designs for three pilot sites along a creek in Poughkeepsie, New York, transforming it into a vibrant community resource. To initiate the implementation of these plans, the design team created a handbook, The Fall Kill Plan, for residents, city agencies, businesses, and local institutions to connect green infrastructure practices to their land use needs.

Network Architecture Lab (NetLab)
Kazys Varnelis, Director

The Network Architecture Lab is an experimental unit that embraces the studio and the seminar as venues for architectural analysis and speculation, exploring new forms of research through architecture, text, new media design, film production and environment design.

An outgrowth of AUDC, the Network Architecture Lab specializes in research as a form of practice. Specifically, we investigate the impact of computation and communications on architecture and urbanism. What opportunities do programming, telematics, and new media offer architecture? How does the network city affect the building? Who is the subject and what is the object in a world of networked things and spaces? How do transformations in communications reflect and affect the broader socioeconomic milieu? The NetLab seeks to both document this emergent condition and to produce new sites of practice and innovative working methods for architecture in the twenty-first century. Using new media technologies, the lab aims to develop new interfaces to both physical and virtual space.

APPENDIX 9: STUDIO-X

http://www.arch.columbia.edu/naab2012/Studio-X-Brochure.pdf

http://www.arch.columbia.edu/naab2012/Studio-X-Logbook-Beijing.pdf

http://www.arch.columbia.edu/naab2012/Studio-X-Logbook-NewYork.pdf

APPENDIX 10 – International Studio Travel

FALL 2008-SUMMER 2012

YEAR	MONTH	COUNTRY	CITY	TITLE	FACULTY	STUDIO
2012	01 - 05	Mexico	Mexico City		Hawkinson, Laurie	Adv. VI
2012	01 - 05	Greece	Athens	Collecting Architecture - Territories	Wasiuta, Mark	Adv. VI
2012	01 - 05	Japan	Tokyo	RE-RUN: Olympics Media and Broadcast Centre	Shigematsu, Shohei	Adv. VI
APPENDIX 5: Exhibitions2012	01 - 05	Brazil	Rio de Janeiro	Rio Super Hospital	Bunge, Eric & Hoang, Mimi	Adv. VI
2012	01 - 05	India	Mumbai	Wild Mumbai: A Total Ecology	Roy, Lindy	Adv. VI
2012	01 - 05	South Africa	Johannesburg, Cape Town	Parametri-Cities: Synapse(i)s	Gooden, Mario	Adv. VI
2012	01 - 05	China	Beijing	Architecture After the Street	Inaba, Jeffrey	Adv. VI
2012	01 - 05	China	Beijing	Megablock to Agri-block Urbanism	Johnson, Jeffrey	Adv. VI
2012	01 - 05	Japan	Tokyo	Supercity (Mega) Models	Kaseman, Keith	Adv. VI
2012	01 - 05	Jordan	Amman	Knowledge City IV: Urban Spring	Levrat, Frederic	Adv. VI
2012	01 - 05	South Africa	Johannesburg	Monograph Studio	LOT-EK	Adv. VI
2012	01 - 05	Brazil	Rio de Janeiro	Fatcomplexhybrid Of High Programmatic Density: Conflicts	Herreros, Juan & Grau, Urtzi	Adv. VI
2012	01 - 05	Russia	Moscow	Architecture as Propaganda: The Red October Chocolate Factory, Moscow	Dochantschi, Markus; Panteleyeva, Masha; Kellogg, Chad	Adv. VI
2012	01 - 05	India	Mumbai	City of Mobile Services	Manaugh, Geoff & Twilley, Nicola	Adv. VI
2012	01 - 05	France	Paris	Infrastructural Architecture	Bell, Michael	Adv. VI
2012	01 - 05	France	Paris	The Dictionary of Received Ideas	Walker, Enrique	Adv. VI
2012	01 - 05	Brazil	Rio de Janeiro	Under Over Out	Mayer, Jurgen & Kushner, Marc	Adv. VI
2012	01 - 05	Japan	Tokyo	Beyond Realtime: Signal and Noise in the Quantified House	Hasegawa, Toru & Collins, Mark	Adv. VI
2012	01 - 05	India	Mumbai	Identity Crisis: The City in the Box Institute	Hoang, Phu	Adv. VI
2011	09 - 12	Turkey	Istanbul	Architecture meets Urban Planning: The Golden Horn Estuary, Istanbul	Dochantschi, Markus	Adv. V
2011	09 - 12	Jordan	Amman	Parametri-Cities: LIVE	Gooden, Mario	Adv. V

2011	09 - 12	Japan	Tokyo	Memory, Memorial & Memorialization: A response to the triple disasters in northeastern Japan on 11.3.11	Breslin, Lynn & Kudo, Kunio	Adv. V
2011	09 - 12	Palestine	Ramallah	Palestinian Project	Konyk, Craig	Adv. V
2011	09 - 12	Dominican Republic	Puerto Plata	Game Changers for the Future City	Plunz, Richard	Adv. V
2011	09 - 12	Brazil	Rio de Janeiro	Operation Barra Megamix	Kaseman, Keith	Adv. V
2011	01 - 05	China	Hong Kong, Guangzhou	Stuff: Re-imagining an Alternative Industrial Landscape	Hawkinson, Laurie and Gallagher, Sean	Adv. VI
2011	01 - 05	South Korea	Seoul	Relocation: New New Town for the New Old Town	Yang, Soo-in	Adv. VI
2011	01 - 05	South Africa	Johannesburg	Parametri-cities 2.0	Gooden, Mario	Adv. VI
2011	01 - 05	USA	Los Angeles	Type vs. Species or the Revelvance of Architectural Mutation	Diaz Alonso, Hernan	Adv. VI
2011	01 - 05	Japan	Tokyo	Brain Hacking: Processing Preference in Architecture	Hasegawa, Toru and Collins, Mark	Adv. VI
2011	01 - 05	Dominican Republic		Post-Crisis Urbanism and Architecture	Shigematsu, Shohei	Adv. VI
2011	01 - 05	China	Hong Kong, Xian	Structure and Form	Inaba, Jeffrey	Adv. VI
2011	01 - 05	China	Hong Kong, Guangzhou, Shenzhen	Megablock Urbanisms 3	Johnson, Jeffrey	Adv. VI
2011	01 - 05	Brazil	Rio de Janeiro	Central Futuros: Tiradentes	Kaseman, Keith	Adv. VI
2011	01 - 05	Japan	Tokyo	Parallel MoMA	Bunge, Eric and Hoang, Mimi	Adv. VI
2011	01 - 05	China	Beijing	Knowledge City	Levrat, Frederic	Adv. VI
2011	01 - 05	Japan	Tokyo	Apocaluxe Now!	Umemoto, Nanako	Adv. VI
2011	01 - 05			Monograph Studio	LOT-EK	Adv. VI
2011	01 - 05	Spain	Barcelona		Herreros, Juan	Adv. VI
2011	01 - 05	Germany	Berlin	LIKE Studio	Mayer, Juergen & Kushner, Marc	Adv. VI
2011	01 - 05	USA	Los Angeles	The Structural Aspects of Empty Space: Architecture, Art, and Edge Cities and Non-Sites	Bell, Michael	Adv. VI
2011	01 - 05	Japan	Tokyo	The Dictionary of Received Ideas	Walker, Enrique	Adv. VI
2011	01 - 05	England	London	Modernizing Speakers' Corner	Prince-Ramus, Joshua	Adv. VI
2011	01 - 05	USA	Culver City	Architecture Bio-Synthesis	Benjamin, David	Adv. VI
2010	09 - 12	Jordan	Amman	Adv. Arch. Studio V- Parametricities	Gooden, Mario	Adv. V
2010	09 - 12	Russia	Moscow	Adv. Arch. Studio V- Russia: Monumentality and Space	Leeser, Thomas	Adv. V
2010	09 - 12	Brazil	Rio de Janeiro	Adv. Arch. Studio V- Second Life: Resurrecting Rio's Centro	Otero-Pailos, Jorge; Konyk, Craig	Adv. V / joint HP
2010	01 - 05	UAE, Qatar	Abu Dhabi, Dubai, Doha	Knowledge City: Abu Dhabi, Dubai, Doha	Levrat, Frederic	Adv. VI
2010	01 - 05	France	Paris	Advanced Arch. Studio VI- New Parameters for Spatial, Structural and Thermal Design in Concrete	Bell, Michael	Adv. VI
2010	01 - 05	many	self-organized	Advanced Arch. Studio VI- GLACIER / ISLAND /	Manaugh, Geoff	Adv. VI

			trips	STORM		
2010	01 - 05			Advanced Arch. Studio VI-	Inaba, Jeffrey	Adv. VI
2010	01 - 05	South Korea	Seoul	Advanced Arch. Studio VI- Reconstruction: Updating the City Block for the next 30 years	Yang, Soo-in	Adv. VI
2010	01 - 05	Japan	Tokyo	Advanced Arch. Studio VI- Computing Kaizen	Hasegawa, Toru; Collins, Mark	Adv. VI
2010	01 - 05	China	Beijing	Advanced Arch. Studio VI- Megablock Urbanisms: Village within a city	Johnson, Jeffrey	Adv. VI
2010	01 - 05	Turkey, Germany	Istanbul, Berlin	Adv. Arch. Studio VI- Crypto-Form, Polytics, Noise: Taking the Post-Empire Pulse	Keller, Ed	Adv. VI
2010	01 - 05	India	Mumbai	Adv. Arch. Studio VI- Public housing in Mumbai	Martin, Reinhold	Adv. VI
2010	01 - 05	Brazil	Manaus, Brasilia, Sao Paulo	Adv. Arch. Studio VI- Rates of Exchange: Surplus and Deficit in the Amazon	Gill, Leslie; Jacobs, M ke	Adv. VI
2010	01 - 05	China	Beijing, Xian	Adv. Arch. Studio VI- Radical Mutations	Gooden, Mario	Adv. VI
2010	01 - 05	China	Hong Kong	Adv. Arch. Studio VI- The 50 km studio: Infrastructure, Energy and New Territories	Hawkinson, Laurie	Adv. VI
2010	01 - 05	Brazil	Rio de Janeiro	Adv. Arch. Studio VI- Made for Rio: Operational Armatures	Kaseman, Keith	Adv. VI
2010	01 - 05	Brazil	Sao Paulo	Adv. Arch. Studio VI- Studio Sao Paolo: Sao Paulo at Three Scales	Lerner, Jaime	Adv. VI
2010	01 - 05			Adv. Arch. Studio VI- LO-TEK Monograph Studio	Tolla, Ada; Lignano, Giuseppe; DeMonchaux, Thomas	Adv. VI
2010	01 - 05	Brazil	Rio de Janeiro	Adv. Arch. Studio VI- City of God: Rio 2016	Solomonoff, Galia	Adv. VI
2010	01 - 05	Japan	Tokyo	Adv. Arch. Studio VI- The Dictionary of Received Ideas	Walker, Enrique	Adv. VI
2009	01 - 05	China	Beijing	Emergent Technologies and Sensory Architectures	Fornabai, Michelle	Adv. IV
2009	01 - 05	USA	Los Angeles	Cannibal House: Modern Family Dwelling After the Zombie Wars	Diaz Alonso, Hernan	Adv. IV
2009	09 - 12	Jordan	Amman	Adv. Arch. Studio V- Converging Territories: Amman	Gooden, Mario	Adv. V
2009	09 - 12	Brazil	Rio de Janeiro	Adv. Arch. Studio V- Imagining a future architecture in Sao Paolo and Rio de Janeiro	Brillembourg, Alfredo; Klumpner, Hubert	Adv. V
2009	09 - 12	Russia	Moscow	Adv. Arch. Studio V- Moscow Revisited	Leeser, Thomas	Adv. V
2009	01 - 05	Morocco & The Netherlands	Casablanca & Utrecht	Learning from Informal and Formal Environments: Casablanca, Morocco/Utrecht, Holland	Brillembourg, Alfredo & Klumpner, Hubert with Collins, Mark & Hasegawa, Toru	Adv. VI
2009	01 - 05	The Netherlands		Manhattan Dys(U)topia	Bunge, Eric & Hoang, Mimi	Adv. VI
2009	01 - 05	Brazil	Manaus, Brasilia, Rio de Janeiro	Rates of Exchange: Surplus and Deficit in Two Global Ecoregions	Gill, Leslie & Jacobs, M ke	Adv. VI

2009	01 - 05	Spain	Madrid	Interventions in Blocks of the Central City, Madrid	Herreros, Juan	Adv. VI
2009	01 - 05			Architectonics of Music	Holl, Steven	Adv. VI
2009	01 - 05	UAE, Oman, Jordan	Dubai, Muscat, Amman	Things Will Get Worse Before They Get Better	Inaba, Jeffrey	Adv. VI
2009	01 - 05			Monograph Studio	LOT-EK (Tolla, Ada and Lignano, Giuseppe)	Adv. VI
2009	01 - 05	Mexico	Mexico City	DF/Distrito Federal, or Downtown Forgotten - Mexico City	Solomonoff, Galia	Adv. VI
2009	01 - 05	Japan	Tokyo	The Dictionary of Received Ideas	Walker, Enrique	Adv. VI
2009	01 - 05	China	Shanghai, Hong Kong	The Stimulus Studio: New Ideas of Infrastructure Architecture for Obama's Stimulus Package NOW	Hawkinson, Laurie and Modi, Ruch ka	Adv. VI
2009	01 - 05	Bhutan?		Building Democracy in Bhutan	Marble, Scott	Adv. VI
2009	01 - 05	South Africa	Cape Town	The Posthuman: Prosthetic Architecture	Gooden, Mario	Adv. VI
2009	01 - 05	China	Beijing	Megablock Urbanisms: Beijing, China	Johnson, Jeffrey	Adv. VI
2009	01 - 05	Brazil	Rio de Janeiro	Conceicao Hill: Stealthy Demonstrations	Kaseman, Keith	Adv. VI
2009	01 - 05	China, Japan	Beijing, Tokyo	Speed, Territory, Communication	Keller, Ed	Adv. VI
2009	01 - 05	United Arab Emirates	Abu Dhabi	Knowledge City - Abu Dhabi	Levrat, Frédéric	Adv. VI
2009	01 - 05	India	Mumbai	Financial Imaginaries: Mumbai—New York	Martin, Reinhold	Adv. VI
2008	09 - 12	The Netherlan ds	Rotterdam	Context: After Breuer, Before OMA: Rotterdam	Konyk, Craig & Prudon, Theodore	Adv V/Joint HP workshop
2008	09 - 12	Turkey	Istanbul	Art-House Productions - Trailer: City, Istanbul, Turkey	Gill, Alistair and Schmid, Veronika	Adv. V

APPENDIX 11 – Summer Workshops

FALL 2008-SUMMER 2012

YEAR	MONTH	Brazil	Rio de Janeiro	TITLE	FACULTY	STUDIO
2012	1	Brazil	Rio de Janeiro	Workshop Madureira: Projects Under Implementation	Rivera, Pedro	PUC-Rio, UFRJ
2012	1	Japan	Tokyo	Workshop Madureira: Final Presentations	Raynaud, Flaviana	PUC-Rio, UFRJ
2012	2	USA	New York	Beyond Realtime	Hasegawa, Toru & Collins, Mark	
2012	3	Japan	Tokyo	Sensing Public Space	Broutin, Jennifer & Farah, Kamal	IBM City Forward, Parsons School of Art, Media, Technology
2012	3	Japan	Tokyo	Code Dojo	Hasegawa, Toru & Collins, Mark	
2012	5	China	Beijing	GSAPP 11 Code Dojo: Processing Study Session	Hasegawa, Toru & Collins, Mark	
2012	6	China	Beijing	China Megacities Lab Summer Workshop: The Future of the Museum	Johnson, Jeffrey	Studio Pei-Zhu
2012	6	Brazil	Bragança	China Megacities Lab Summer Workshop: Public Space? A Case for Dawangjing	Johnson, Jeffrey	Urbanus, CAFA
2012	6	Brazil	Rio de Janeiro	Amazon Summer Workshop: Genius loci meet Locus Geni	Foyo, Alberto	
2012	6	Jordan, Turkey	Amman, Istanbul	Cidade de Deus: Ideas of and for a Wonderful City		ETH Zurich, Comcat.org, Something Fantastic
2012	6	Brazil	Rio de Janeiro	Contemporary Public Space in the Middle East Workshop: Presence	Broutin, Jennifer & Farah, Kamal	Jordan University of Science & Technology, German Jordanian University, Bilgi University Istanbul, Istanbul Technical University, Middle East Technical University
2012	7	China	Beijing	Fabrication Workshop	Anzalone, Philip	PUC-Rio, Arts and Crafts, Matters Brazil
2012	7	India, China	Mumbai, Beijing	deVices of Perception: Virtual Museum of Architecture Beijing Workshop	Konyk, Craig & Wei Ke, James	Crystal CG
2012		China	Guizhou Province	Columbia Global Scholars Program: Summer Research Workshop		

2012	8	China	Beijing	Derivation for Innovation in Guizhou Workshop	Hosagrahar, Jyoti	SUI Lab, Studio-X Beijing
2012	1	Japan	Tokyo	Safari 4	Kim, Janette	Asian Cultural Council, Beijing Mass Transit Railway Corporation (MTR), Balintimes Advertising Co.
2012	8	Italy	Rome	Green Airplane: Breaking through Invisible Wall, GSAPP11 Lecture Series vol.4		
2011	1	India	Mumbai	Historic Preservation		
2011	1	India	Mumbai	Envisioning Education in India Workshop		
2011	2	India	Mumbai	Unsolicited Architecture		
2011	2	India	Mumbai	Unsolicited Architecture Workshop: The Architecture of Community	Wigley, Mark; Thakker, Rajeev	GSAPP, Netherlands Architecture Institute (NAI), Studio X
2011	2	Brazil	Rio de Janeiro	Learning Off the Grid	Kurtin, Annie; Raj, Ravi	
2011	3	Greece	Lesvos	Studio Sangue Bom Workshop	Kaseman, Keith	Nai
2011	summer	China	Chengdu, Xi'an	Historic Preservation Workshop	Devonshire, Michael	
2011	6	Brazil	Rio de Janeiro	China Megacities Lab Beijing Summer Workshop	Johnson, Jeffrey	
2011	6	Finland	Turku	Operation Barra Megamix		
2011	7	Greece	Thessaloniki	Fabrication Workshop	Anzalone, Philip	University of Oulu
2011	7	Jordan	Amman	Terra Incognita	Kallipoliti, Lydia	Northern Greece Entrepreneurs Cultural Society
2011	7	Palestine	Ramallah	Amman Lab Workshop 2011: Response	Broutin, Jennifer & Farah, Kamal	American University of Beirut, Bilgi University Istanbul, University of Jordan
2011	8	Brazil	Sao Paulo	Imagine a Palestine Joint Architecture/HP Workshop	Konyk, Craig & Tung, Anthony	RIWAQ
2011	11	Brazil		Sao Paulo	Unsolicited Architecture: Imaginary São Paulo: A Photo-Novel on Mobility	
2011	11	Brazil	Sao Paulo	Unsolicited Architecture: DADAtown		
2011	11	India	Mumbai	Unsolicited Architecture: Vacancy		
2011	11	China	Beijing	UnPREPareD: lessons from the informal economy	Princen, Bas; DROOG	Droog Lab, DCOOP, Archis/Volume, DOMUS, URBZ, Dutch Ministry of Education, Culture and

						Science,City of Amsterdam
2011	11	Japan	Tokyo	Spectacle on the edge of London and Beijing		
2011	12	China	Shanghai	Living in Radiation		
2010	6	China	Beijing	China Megacities Lab	Johnson, Jeffrey	
2010	6	Jordan	Amman	China Megacities Lab	Johnson, Jeffrey	Central Academy of Fine Arts, Chinese University Hong Kong
2010	6	Brazil	Rio de Janeiro	Mosaic Workshop	Hijazi, Hana	Institute for Traditional Islamic Art and Architecture, El-Hassan Youth Awards
2010	7	Turkey	Amman	Historic Preservation workshop	Dolkart, Andrew; Wheeler, George; Rivera, Pedro; Van Riel, Sabine	Roberto Marinho Foundation
2010	7	Japan	Tokyo	Public Space Workshop: Comfort	Broutin, Jennifer & Farah, Kamal	Jordan University of Science & Technology, Birzeit University, American University of Sharjah
2010	7	Brazil	Rio de Janeiro	Fabrication Workshop	Anzalone, Philip	University of Tokyo
2010	7	Brazil	Sao Paulo	Unsolicited Architecture	Nobre, Ligia	NAi, Subsecretary of Heritage Urban Intervention Architecture and Design of the City of Rio, Moderna Art Museum
2010	7	China	Beijing	City Flooding Workshop	Nobre, Ligia	Nai, Escola da Cidade
2010	10	Jordan	Amman	Workshop: Grassroots Mapping in Be jing		
2009	03 - 06	Jordan	Amman	Historic Preservation workshop: Bait Ibrahim Hashem Documentation Report (I)	Dolkart, Andrew	
2009	6	China	Beijing	Historic Preservation workshop: Bait Ibrahim Hashem Documentation Report (II)	Dolkart, Andrew & Wheeler, George	
2009	06 - 07	Jordan	Amman	China Megacities Lab Beijing Summer Workshop	Johnson, Jeffrey	
2009	7	Spain	Madrid	Public Space Workshop: Intimacy	Broutin, Jennifer & Farah, Kamal	American University of Sharjah, Bezalel University
2009	7	Brazil	Rio de Janeiro	Fabrication Workshop	Anzalone, Philip	ETSAM
2009	10	China	Beijing	Social Mobility Workshop	Brillembourg, Alfredo; Klumpner, Hubert; Rivera, Pedro	Secretaria de Haitação do Rio de Janeiro

2008	6	Italy	Torino	China Megacities Lab: Mega-Block to Mega-Block	Johnson, Jeffrey	USC
2008	7	Brazil	Rio de Janeiro	Fabrication Workshop	Anzalone, Philip	AASchool, Politecnico di Torino

APPENDIX 12: Columbia Building Intelligence Project (C-BIP)

http://www.arch.columbia.edu/naab2012/CBIP-Studio.pdf

http://www.arch.columbia.edu/naab2012/CBIP-Think-Tank-London-Poster.pdf

http://www.arch.columbia.edu/naab2012/CBIP-Think-Tank-London-Program.pdf

http://www.arch.columbia.edu/naab2012/CBIP-Think-Tank-Brooklyn-Poster.pdf

http://www.arch.columbia.edu/naab2012/CBIP-Think-Tank-Brooklyn-Program.pdf

http://www.arch.columbia.edu/naab2012/CBIP-Think-Tank-NewYork-Poster.pdf

http://www.arch.columbia.edu/naab2012/CBIP-Think-Tank-NewYork-Program.pdf

http://www.arch.columbia.edu/naab2012/CBIP-Think-Tank-Stuttgart-Poster.pdf

http://www.arch.columbia.edu/naab2012/CBIP-Think-Tank-Stuttgart-Program.pdf

http://www.arch.columbia.edu/naab2012/CBIP-Think-Tank-Toronto-Poster.pdf

http://www.arch.columbia.edu/naab2012/CBIP-Think-Tank-Toronto-Program.pdf

http://www.arch.columbia.edu/naab2012/CBIP-Think-Tank-Tokyo-Poster.pdf

http://www.arch.columbia.edu/naab2012/CBIP-Think-Tank-Tokyo-Program.pdf

APPENDIX 13: Design / Build

http://www.arch.columbia.edu/naab2012/Design-Build.pdf

APPENDIX 14: The Temple Hoyne Buell Center for the Study of American Architecture

Columbia University's Temple Hoyne Buell Center for the Study of American Architecture was founded in 1982. Its mission is to advance the interdisciplinary study of American architecture, urbanism, and landscape. A separately endowed entity within the Graduate School of Architecture, Planning and Preservation, it sponsors research projects, workshops, public programs, publications, and awards. In recognition of its overlapping constituencies, which include academics, professionals, and the general public, the Buell Center has recently pursued initiatives that explore architecture's participation in the public sphere. These include an ongoing series of discussions among architects and architectural critics regarding architecture's responsibilities and potential today, conferences and seminars that explore new approaches to the study of American architecture, and a sustained effort to help catalyze a new, national conversation about issues of general concern such as public housing.

The Buell Center sponsors two ongoing bi-annual conference series, alternating each spring between The Buell Conference on the History of Architecture and the Buell Dissertation Colloquium. This year, the History/Theory conference, “Technics and Art: Architecture, Cities, and History after Mumford” invited scholars to reflect on the themes outlined by Lewis Mumford in the Bampton Lectures in America, presented at Columbia University in 1951, and published the following year as Art and Technics. Buell invited scholars in architectural and urban history, American studies, environmental history, and the history of technology to consider knowledge and insights on the interactions of technology, aesthetics, urbanity, ecology, and politics under a variety of historical circumstances involving the North American context. The Dissertation Colloquium provides an opportunity for a select group of doctoral students to present and discuss papers from dissertation work related to the history, theory, and criticism of American architecture, urbanism, and landscape.

During the 2011–2012 academic year, a three year Buell Center initiative culminated with the exhibition Foreclosed: Rehousing the American Dream, as part of a collaboration with the Department of Architecture and Design at the Museum of Modern Art (MoMA). The exhibition, which ran from February-August, 2012, aimed to stimulate debate regarding the cultural narratives that have accompanied the home foreclosure crisis and the economic crisis more generally. The Buell Hypothesis, a research document that interrogates the “American Dream” of the private house, served as the exhibition’s conceptual brief. It also identified study sites in different regions across the United States, on the basis of both quantitative and qualitative factors including foreclosure rates, poverty rates, population trends, average commute times, amounts of publicly held land, and other relevant criteria. Five multi-disciplinary teams, led by architects Amale Andraos and Dan Wood of WORKac, Eunjeong Seong and Michael Bell of Visible Weather, Hilary Sample and Michael Meredith of MOS, Jeanne Gang of Studio Gang, and Andrew Zago of Zago Architecture were each invited to design an architectural and urban project in one of these suburbs, focusing on new forms of housing.

The exhibition developed through a series of workshops throughout the summer at MoMA PS1, including “Open-Studios” which invited the public to view and discuss the work in progress. The series concluded with a keynote address, titled “From Crisis to Opportunity: Rebuilding Communities in the Wake of Foreclosure,” by U.S. Secretary of Housing and Urban Development Shaun Donovan. Results of the workshop, including transcriptions of Secretary Donovan’s speech and other panel discussions, excerpts from The Buell Hypothesis, and the architect’s proposals were compiled in the exhibition’s catalog, Foreclosed: Rehousing the American Dream, (Bergdoll, Martin, 2012).

To mark the opening of the exhibition, The Buell Center collaborated with GSAPP Exhibitions to bring excerpts of the show to Columbia University in February and convened a one day forum in the Low Memorial Library Rotunda entitled: “What is Foreclosed? Housing, Suburbanization, and Crisis.” The Forum invited artists, activists, and academics to use the museum projects as a point of departure from which to explore issues engaged by architecture and urbanism when considered in a cultural, political, and economic context.

The show was also adapted for the Rio+20 United Nations Conference on Sustainable Development in June, 2012.

Each year, the Buell Center Archival Research & Oral History Award grants between $3000 and $5000 to up to three full-time Columbia University students, for the purpose of carrying out primary research in conjunction with a master's thesis or PhD dissertation project. The awards are for historical research on the built environment within or between the fields of architecture, urban history, or landscape, encouraging interdisciplinary or comparative work on the Americas and projects with an oral history component. As part of the award, recipients must attend a one-semester course on the method and theory of oral history.

These and other Buell Center projects utilize a variety of formats, such as specialized academic conferences, small meetings, larger public events, and publications, depending on the issues and audience at hand. In all cases, they offer a context for the study of American architecture in a manner that brings underlying issues to light and enables architecture's various interconnected publics to gain a greater understanding of its cultural significance.

APPENDIX 15: Annual Budgets and Expenditures

GRADUATE SCHOOL OF ARCHITECTURE, PLANNING AND PRESERVATION
M.ARCH NAAB FINANCIAL REPORT - 2012
(000s)

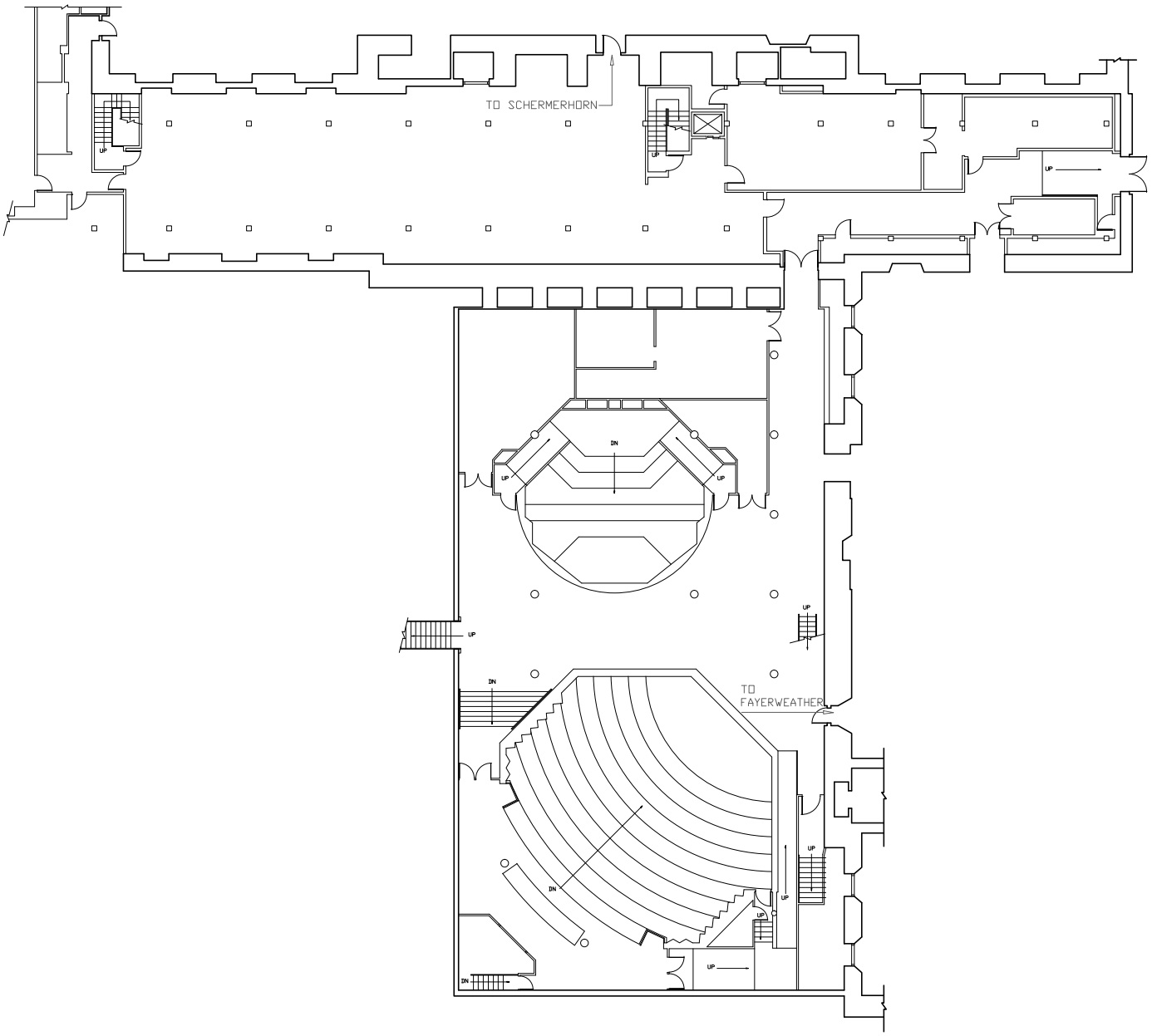
	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	ESTIMATED 2012-2013
	M.ARCH	M.ARCH	M.ARCH	M.ARCH	M.ARCH	M.ARCH
SUMMARY OF SOURCES						
Direct Revenues and Support						
Tuition	$8,351	$9,038	$10,181	$11,006	$10,908	$11,722
Fees	$140	$155	$153	$148	$135	$138
Less financial aid grants	$1,065	($1,312)	($1,431)	($2,438)	($2,624)	($2,773)
Net tuition and fees	$9,556	$7,881	$8,904	$8,716	$8,419	$9,087
Government grants and contracts						
Direct	$0	$0	$0	$0	$18	$0
Indirect	$0	$0	$0	$0	$2	$0
Private gifts, grants and contracts						
Gifts	$17	$14	$11	$23	$1,580	$10
Private grants and contracts						
Direct	$0	$0	$0	$0	$71	$0
Indirect	$0	$0	$0	$0	$14	$0
Revenues from other educational and research activities						
Patent and license	$0	$0	$0	$0	$0	$0
Other	$58	$51	$46	$76	$51	$64
Investment income and gains utilized	$648	$818	$722	$694	$669	$791
Total Direct Revenues and Support	**$10,278**	**$8,764**	**$9,683**	**$9,508**	**$10,823**	**$9,951**
Operating Transfers In and Indirect Sources						
Overhead allocations from other units	$0	$0	$0	$0	$0	$0
Budget allocations from other units	$247	$269	$209	$178	$164	$191
Current fund transfers from other units	$319	$201	$63	$23	($3)	$0
Total Operating Transfers In and Indirect Sources	**$566**	**$470**	**$272**	**$202**	**$161**	**$191**
GRAND TOTAL SOURCES	**$10,844**	**$9,234**	**$9,955**	**$9,710**	**$10,984**	**$10,142**
SUMMARY OF USES						
Direct Expenses						
Instruction and educational administration						
Instructional and faculty support	$3,328	$3,441	$3,705	$4,199	$4,375	$4,343
Student services	$117	$136	$131	$128	$115	$120
External affairs and fundraising	$199	$180	$204	$293	$285	$323
Non-tuition financial aid expense	$4	$0	$0	$35	$154	$162
General and financial administration	$391	$419	$474	$620	$603	$764
Information technology	$348	$422	$449	$547	$358	$431
Other - instruction-related	$372	$375	$431	$514	$369	$422
Research	$68	$152	$54	$65	$42	$0
Debt service	$24	$24	$22	$22	$21	$21
Major equipment	$18	$20	$12	$47	$2	$29
Other expenses	$0	($0)	$2	$2	$0	$0
Total Direct Expenses	**$4,869**	**$5,170**	**$5,484**	**$6,471**	**$6,323**	**$6,616**
Operating Transfers Out and Indirect Uses						
Overhead allocations to other units	$2,381	$2,501	$2,487	$2,687	$2,569	$2,677
Current fund transfers to other units	$130	$85	$54	$51	$54	$53
Total Operating Transfers Out and Indirect Uses	**$2,511**	**$2,586**	**$2,540**	**$2,737**	**$2,623**	**$2,730**
GRAND TOTAL USES	**$7,380**	**$7,755**	**$8,024**	**$9,208**	**$8,945**	**$9,345**
OPERATING INCREASE/(DECREASE)	**$3,464**	**$1,479**	**$1,931**	**$501**	**$2,039**	**$797**
Transfers from/(to) Non-Operating Uses						
Fund Balance Transfers from / (to) Plant	$0	$0	($20)	($52)	($28)	($160)
Fund Balance Transfers from / (to) Endowment	($611)	($1)	$0	($42)	$0	$0
Net Change In Current Fund Balance, Surplus/(Overdraft)	**$2,853**	**$1,478**	**$1,911**	**$408**	**$2,011**	**$637**

NOTES:

GSAPP SCHOOL BUDGET PRORATED USING M.ARCH FTE EXCEPT FOR FINANCIAL AID (ACTUAL PROVIDED BY DEAN SMOLLER), GIFTS, GRANTS, AND NON-TUITION FINANCIAL AID.
IN CERTAIN CATEGORIES (INFORMATION TECHNOLOGY AND TRAVEL, FOR EXAMPLE) THE RESOURCES DEDICATED ARE SIGNIFICANTLY HIGHER PER STDUENT THAN IN OTHER PROGRAMS.
M.ARCH FTE BASED ON TUITION REVENUE.
FY12 OPERATING INCREASE/DECREASE INCLUDES $900K THOMSON REUTERS GIFT THAT WILL BE SPENT IN FY13.
M.ARCH ASSISTANTSHIPS ARE INCLUDED IN THE FINANCIAL AID TOTAL BEGINNING FY2011.

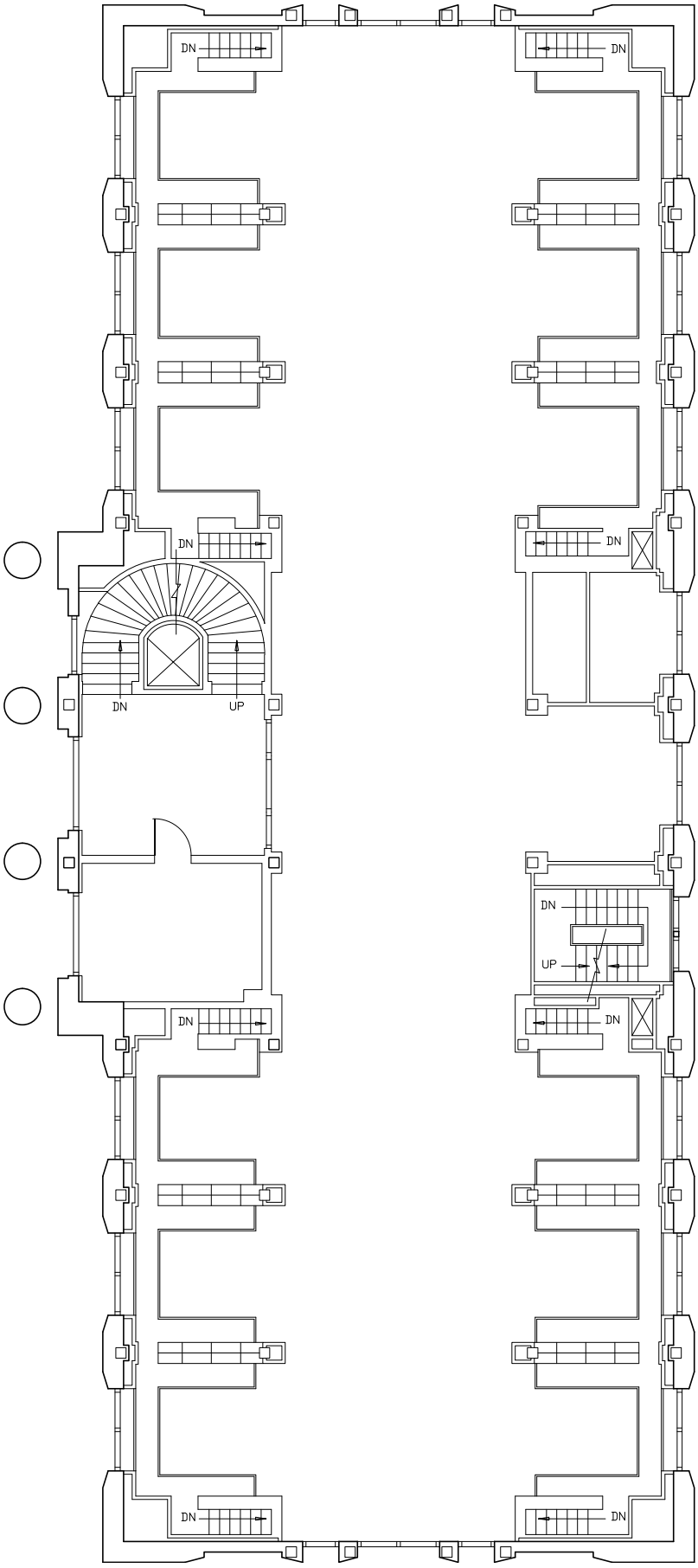
APPENDIX 16: Plans of the School's Facilities

Avery Hall
Level 1



Scale: 1’ = 1/32”

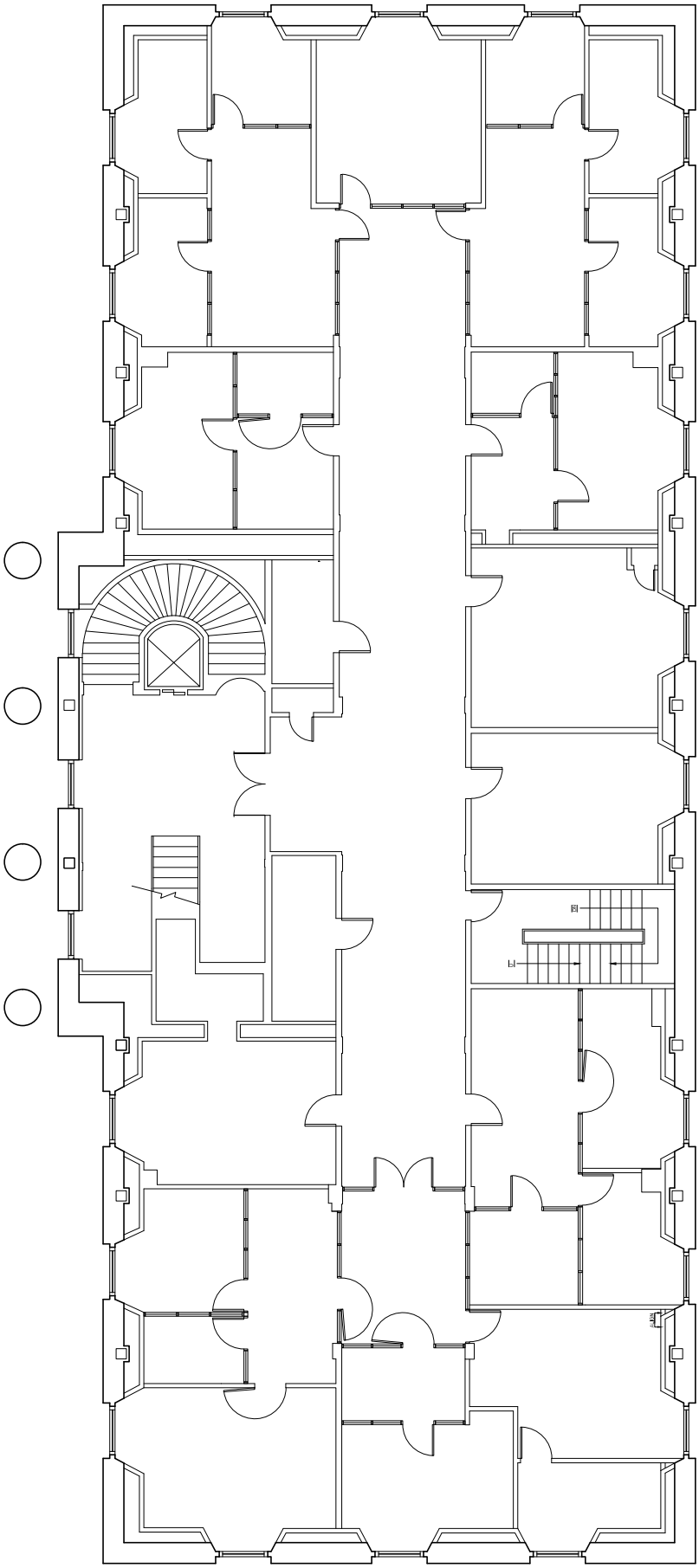
Avery Hall
Level 3M



N

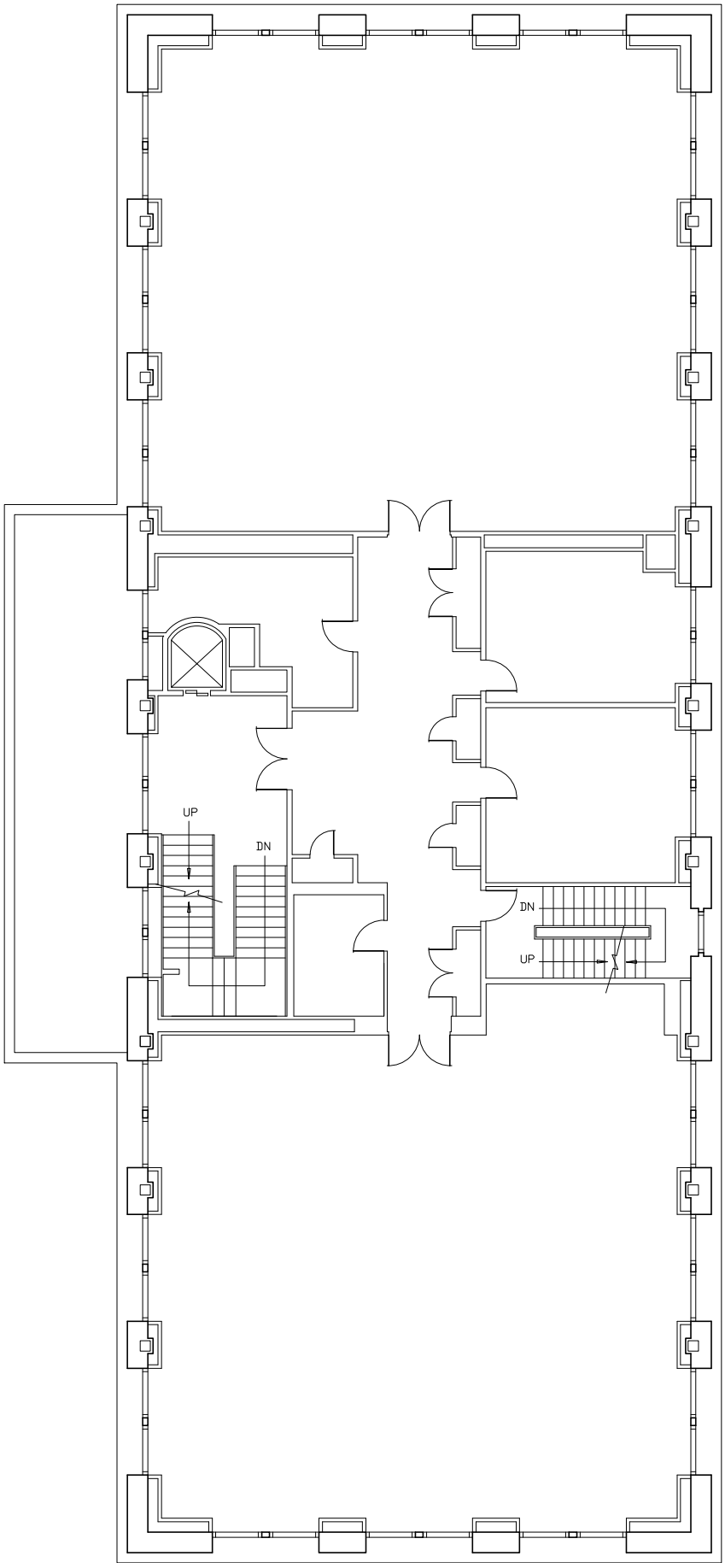
Scale: 1’ = 1/16”

Avery Hall
Level 4



Scale: 1’ = 1/16”

Avery Hall
Level 5



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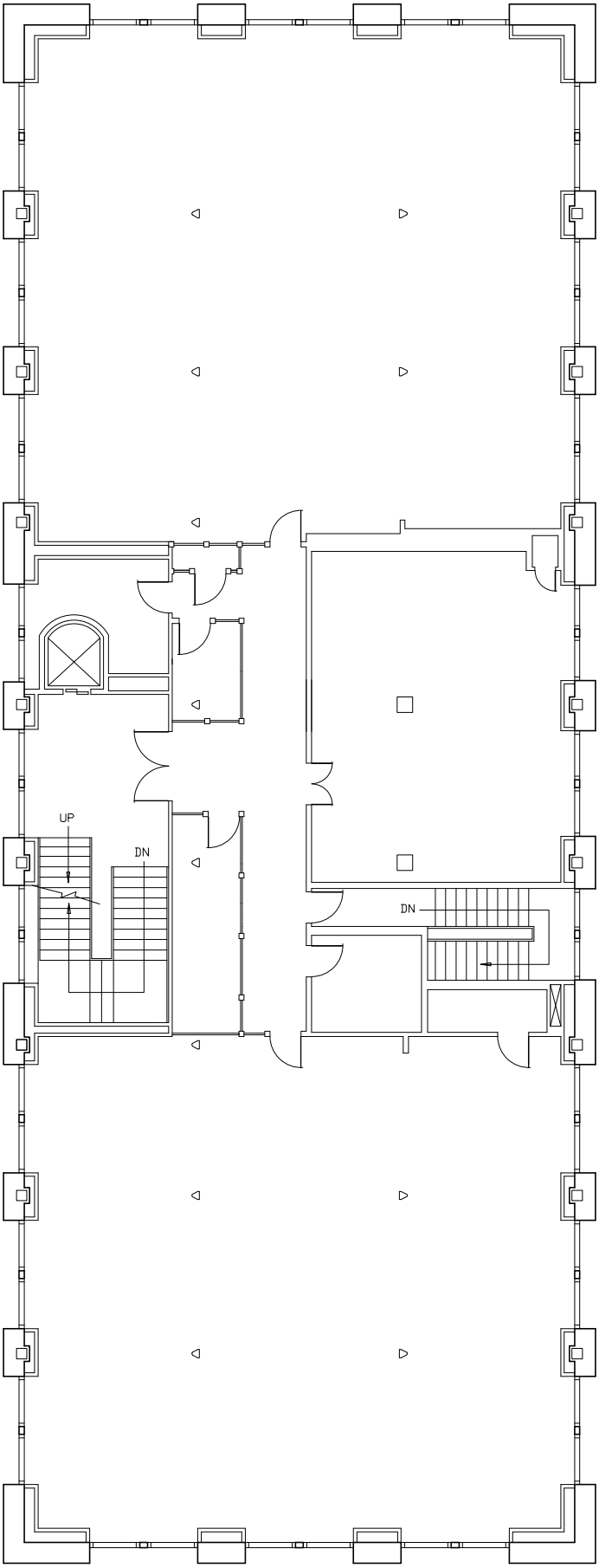
Scale: 1’ = 1/16”

Avery Hall
Level 6



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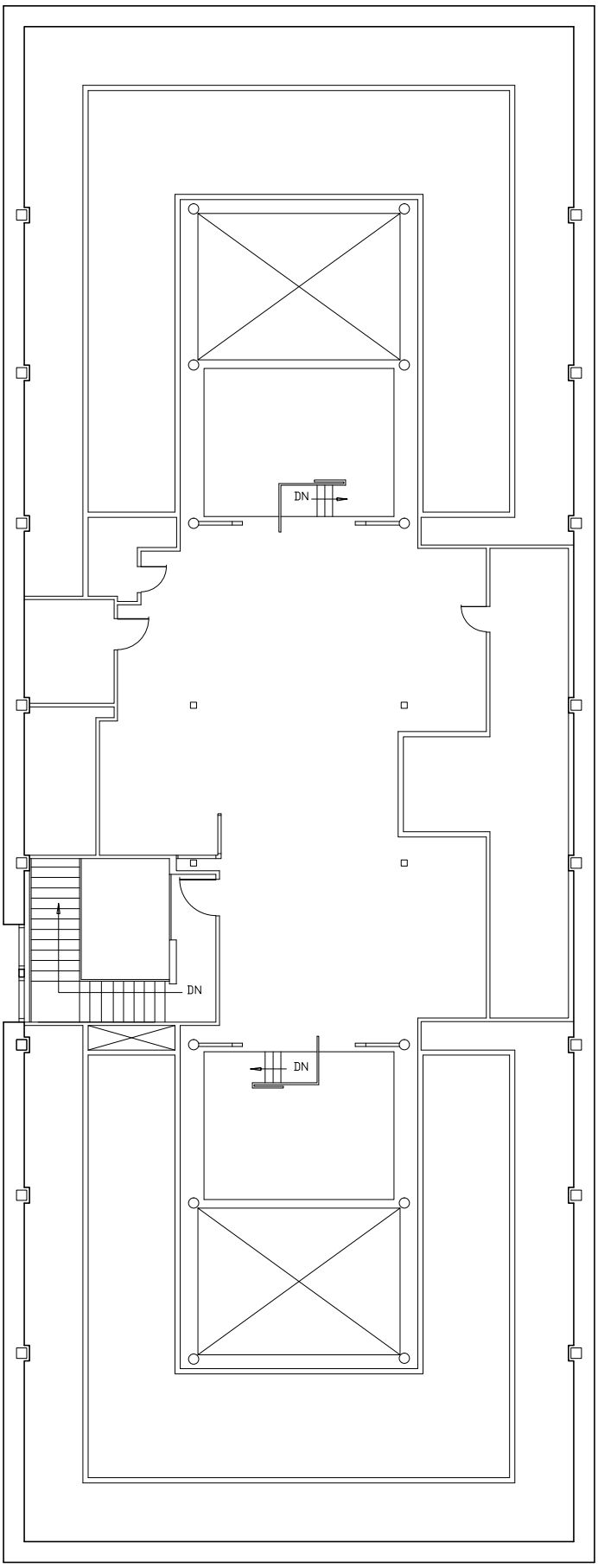
Scale: 1’ = 1/16”

Avery Hall
Level 7



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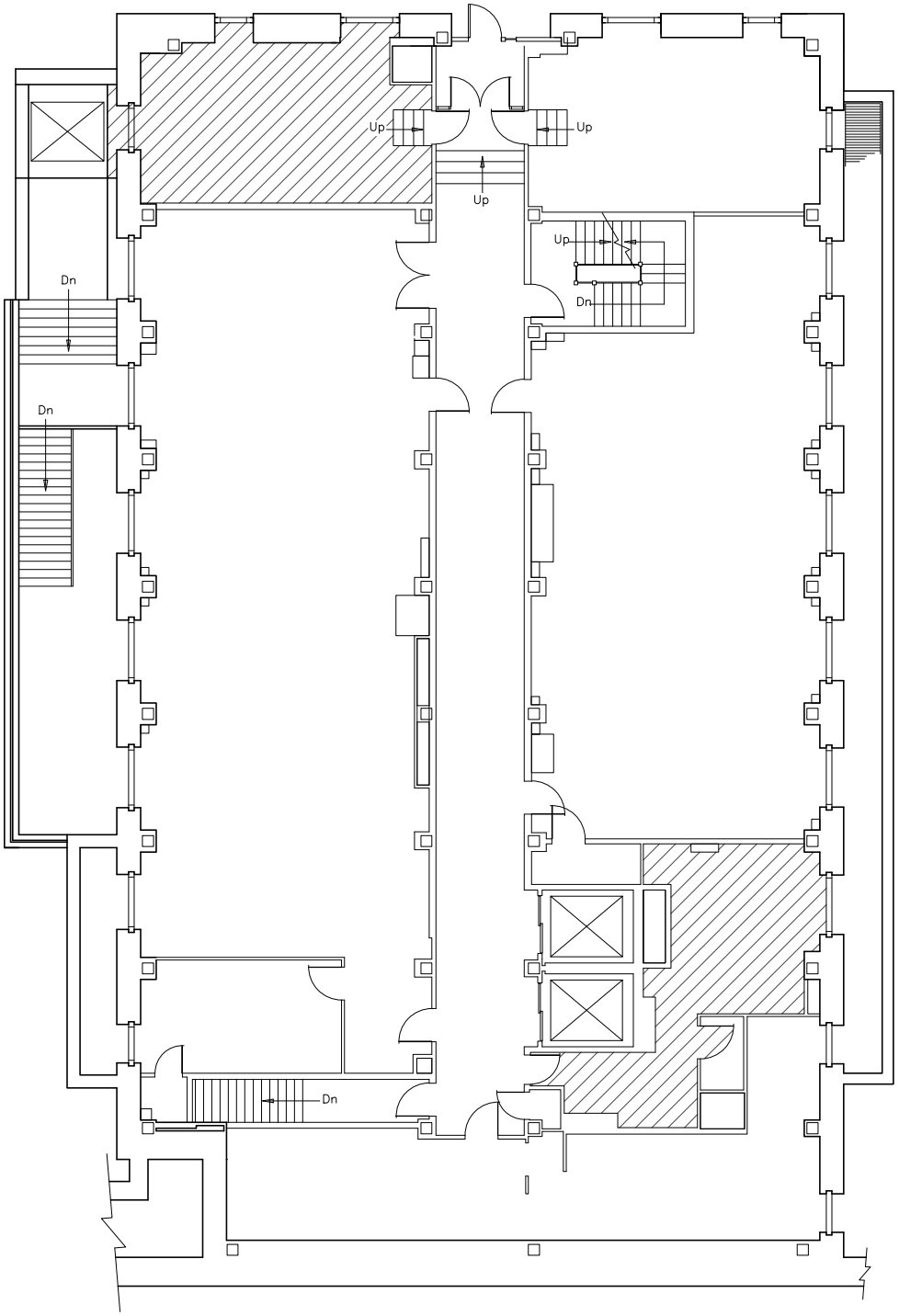
Scale: 1’ = 1/16”

Schermerhorn Hall Extension
Level 1



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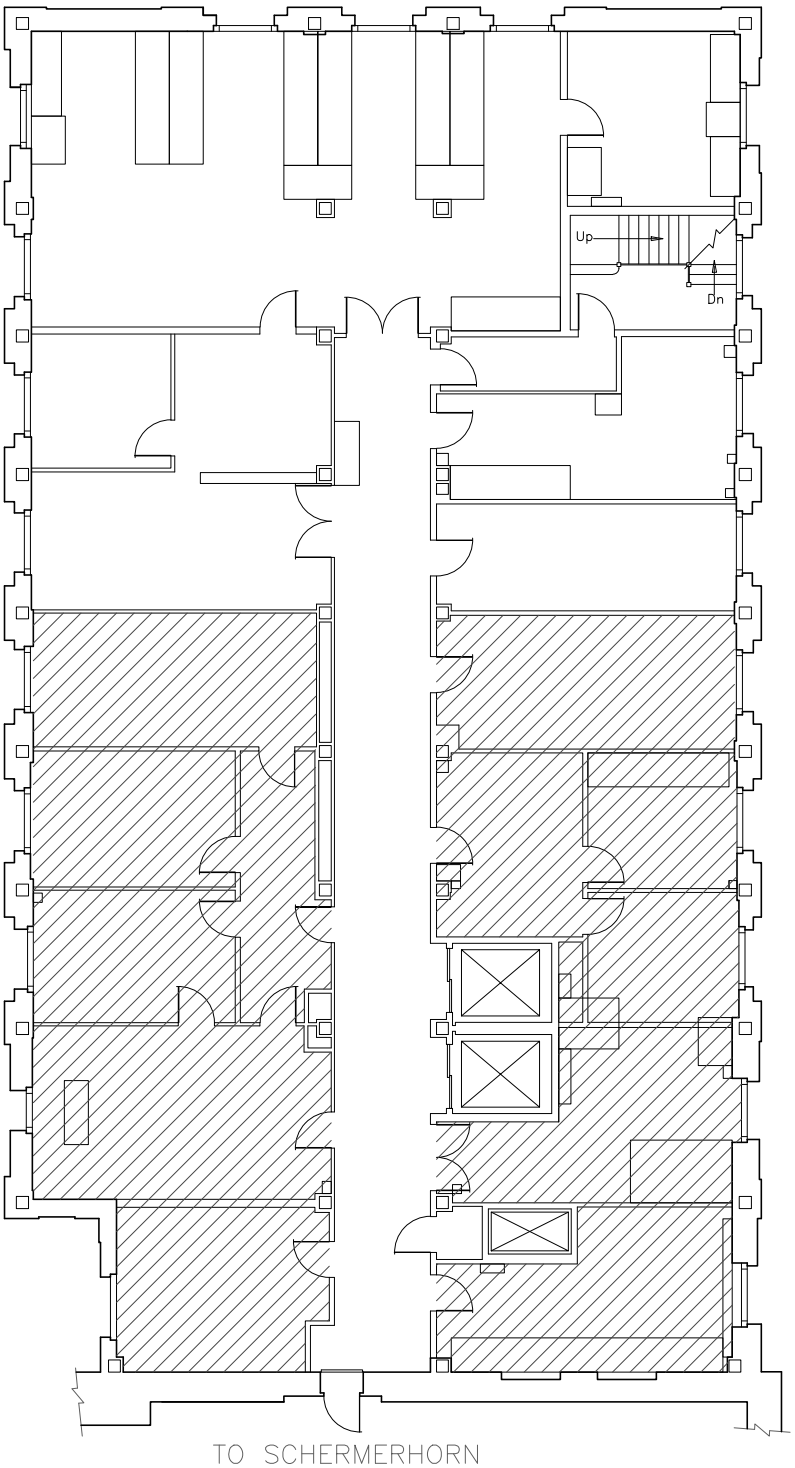
Scale: 1’ = 1/16”

Schermerhorn Hall Extension
Level 6



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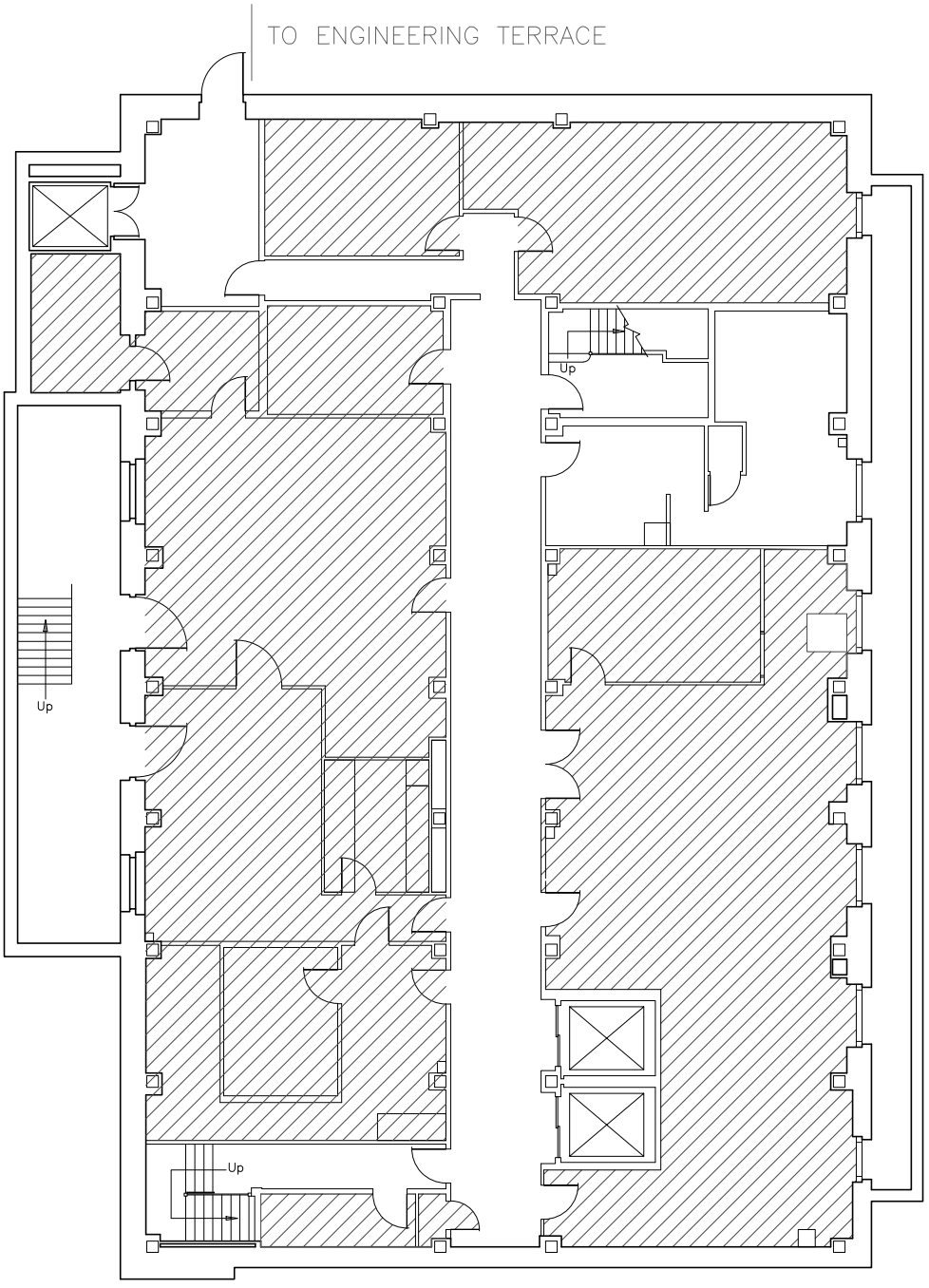
Scale: 1’ = 1/16”

Schermerhorn Hall Extension
Level B



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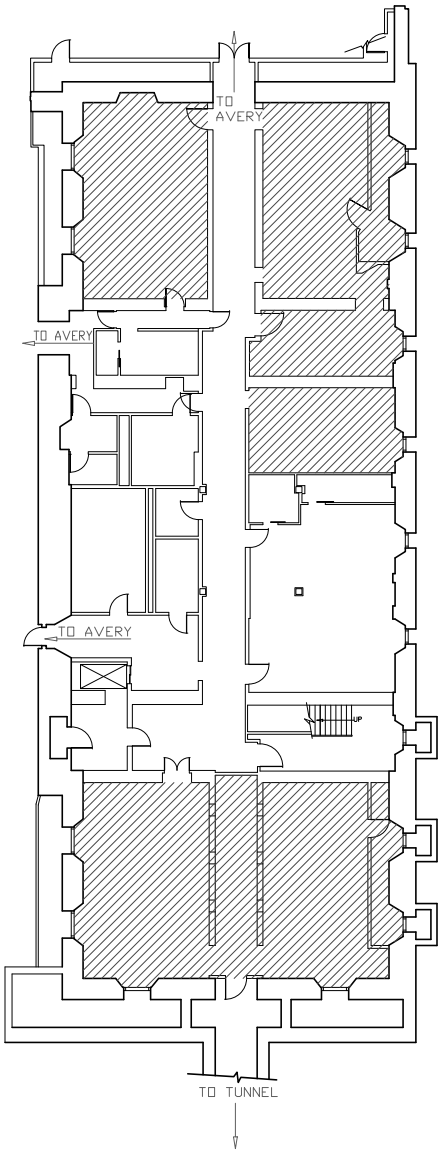
Scale: 1’ = 1/16”

Fayerweather Hall
Level 1



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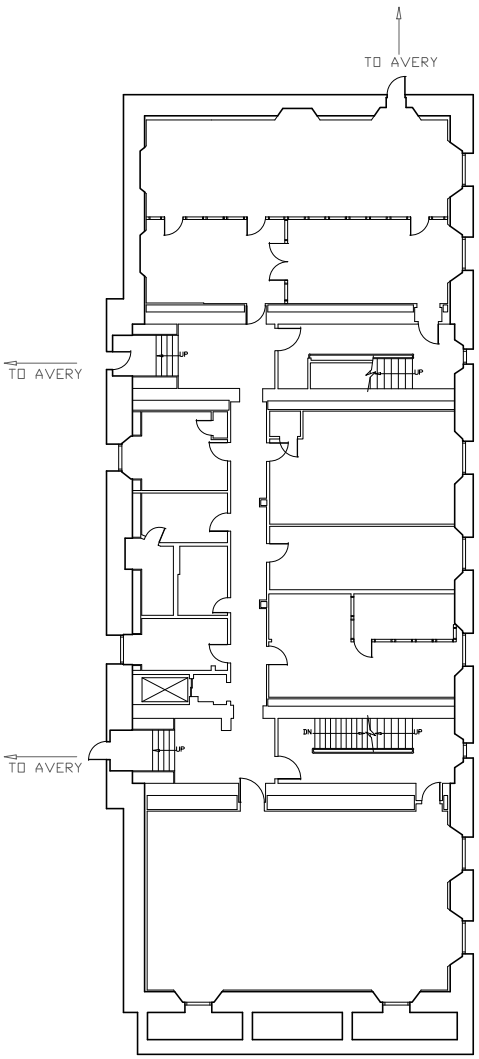
Fayerweather Hall
Level 2



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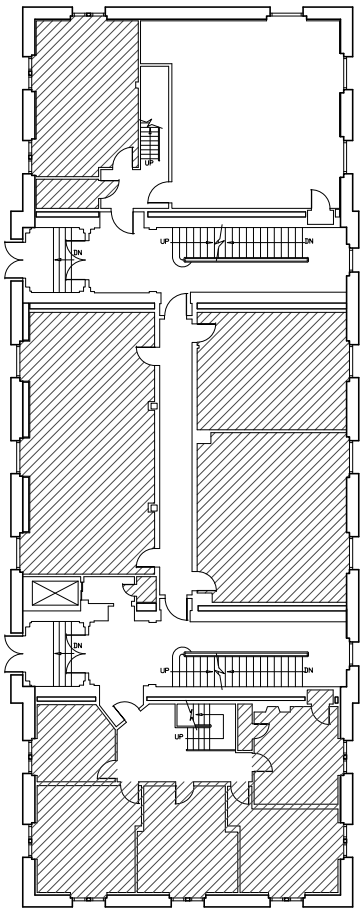
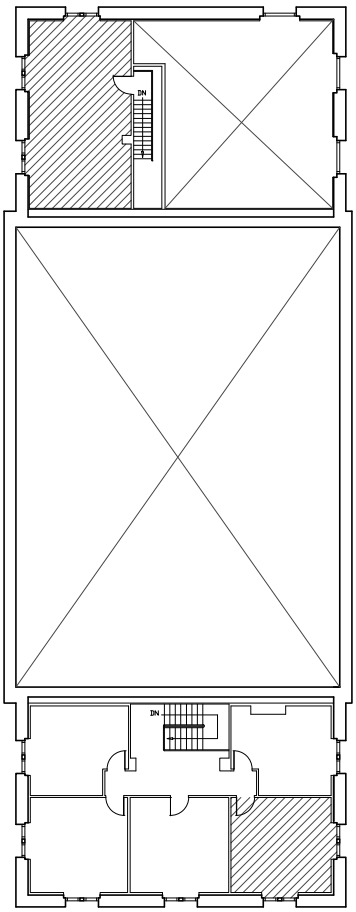
Scale: 1’ = 1/32”

Fayerweather Hall
Level 3



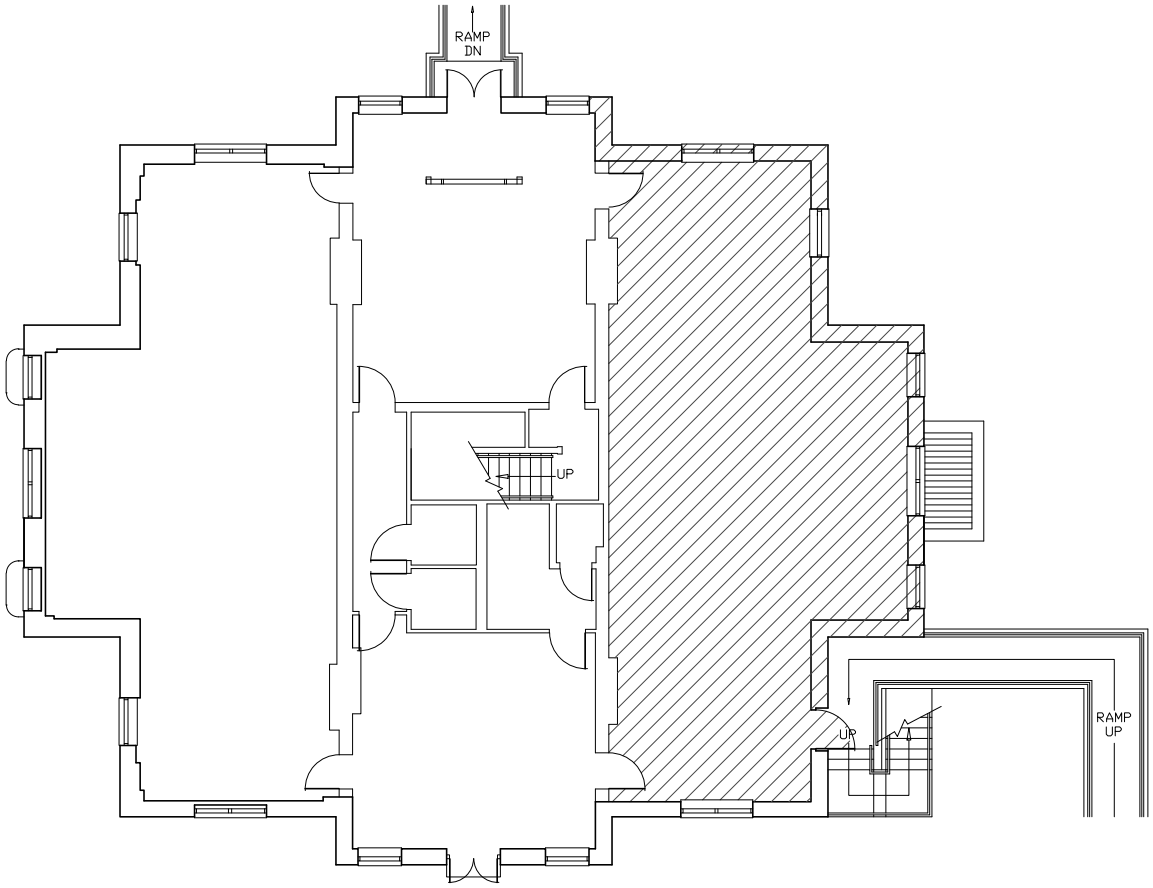
Scale: 1’ = 1/32”

Fayerweather Hall
Level 3M



Scale: 1’ = 1/32”

Buell Center
Level 1



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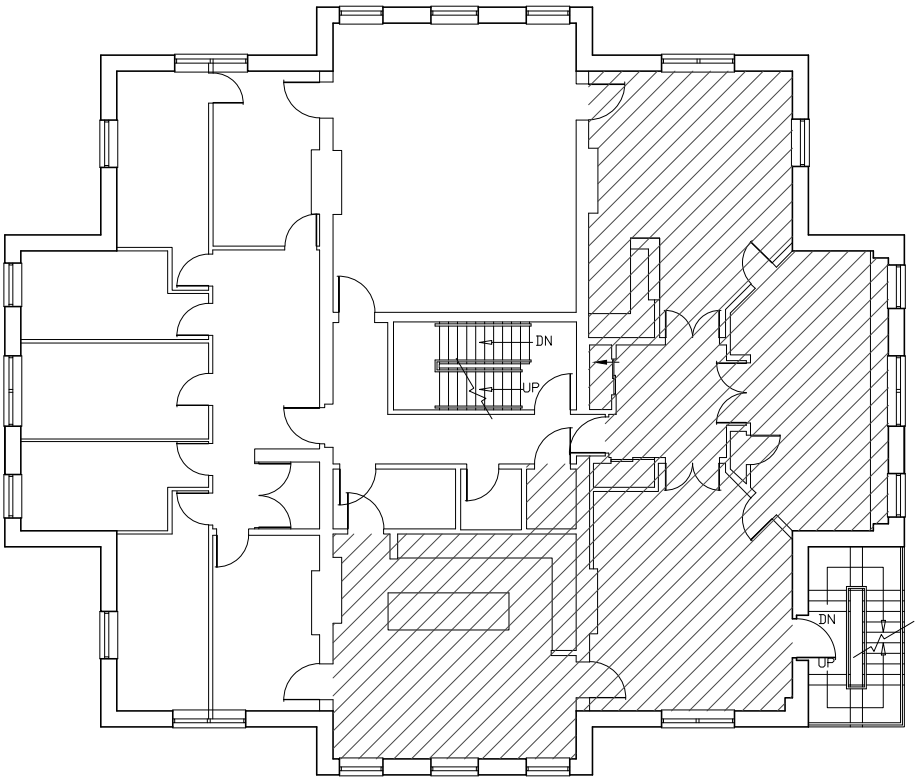
Scale: 1’ = 1/16”

Buell Center
Level 2



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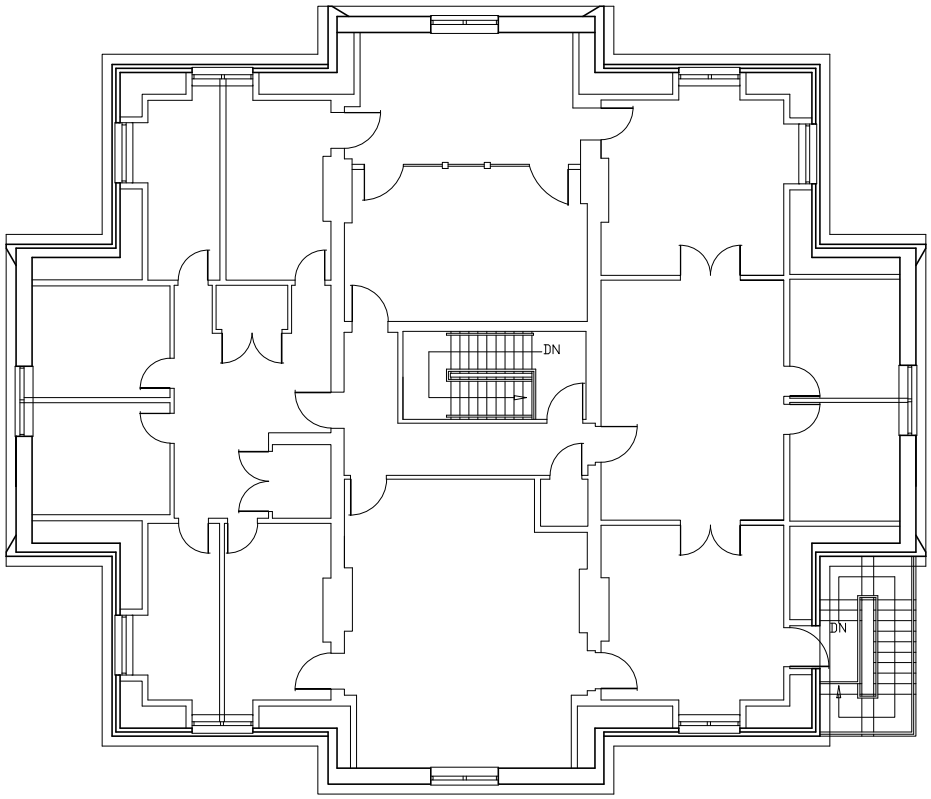
Scale: 1’ = 1/16”

Buell Center
Level 3



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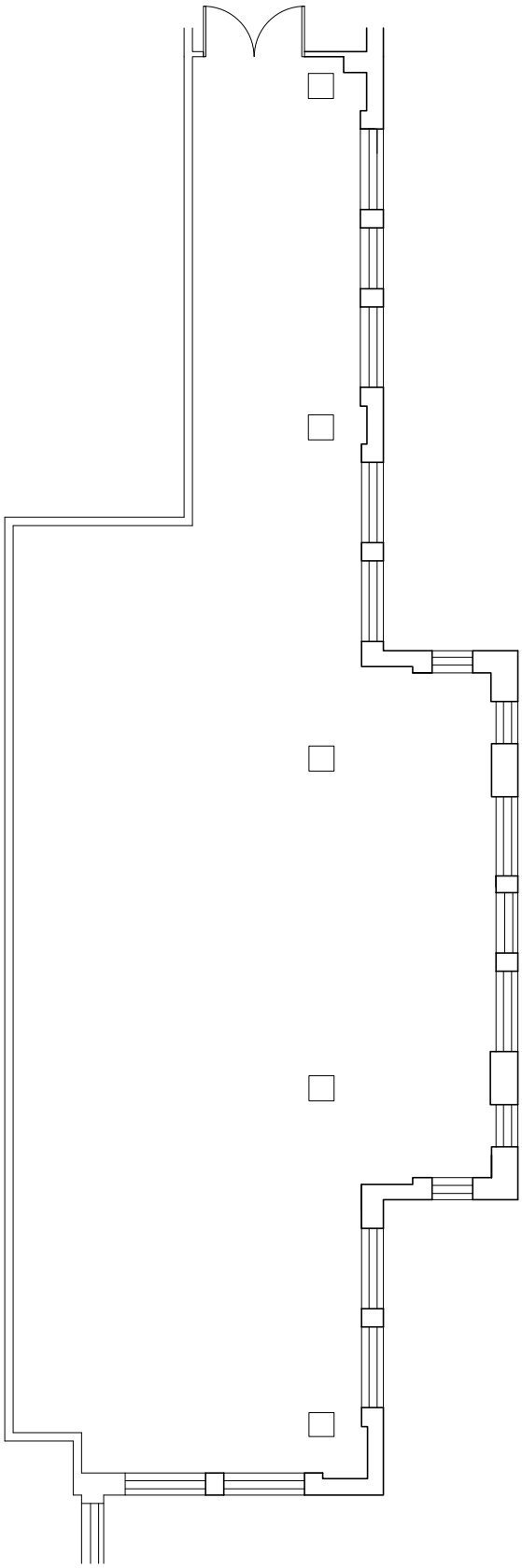
Scale: 1’ = 1/16”

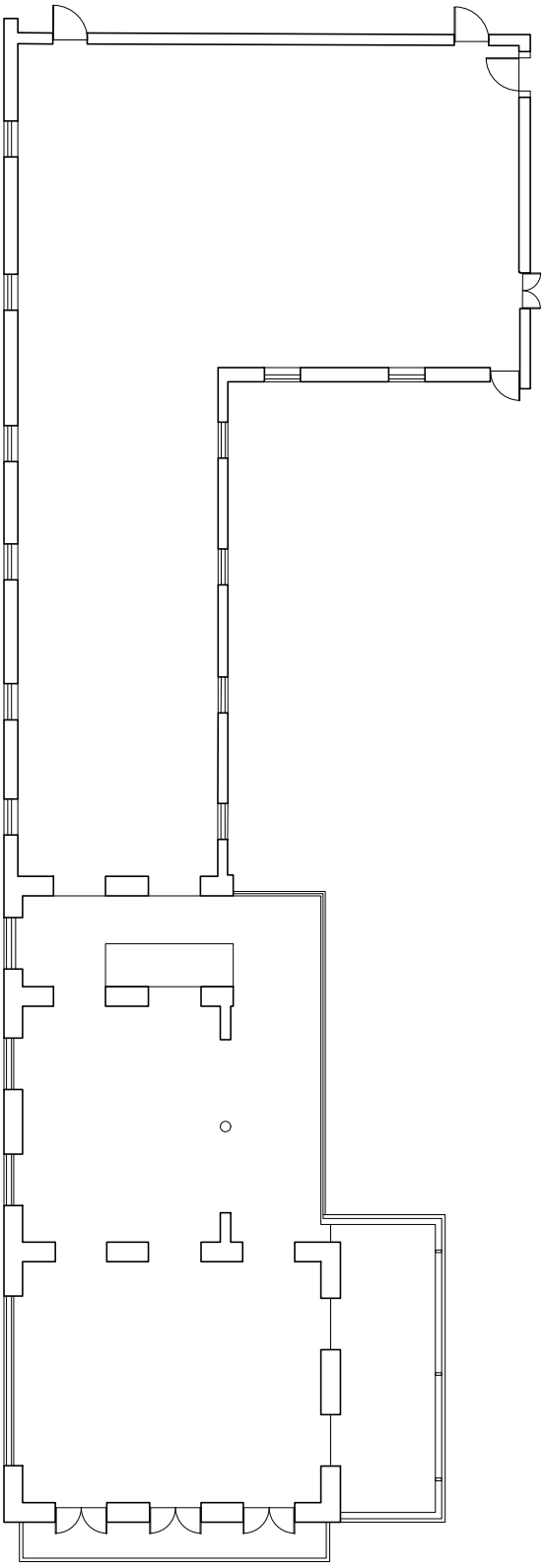
Studio X - New York



Scale: 1’ = 3/32”

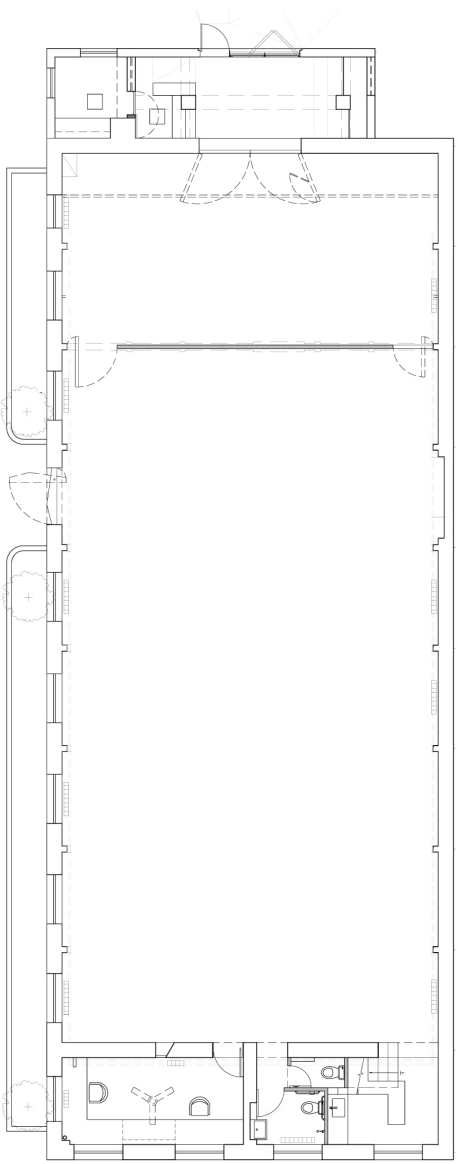
Scale: 1’ = 1/32”

Studio X - Mumbai



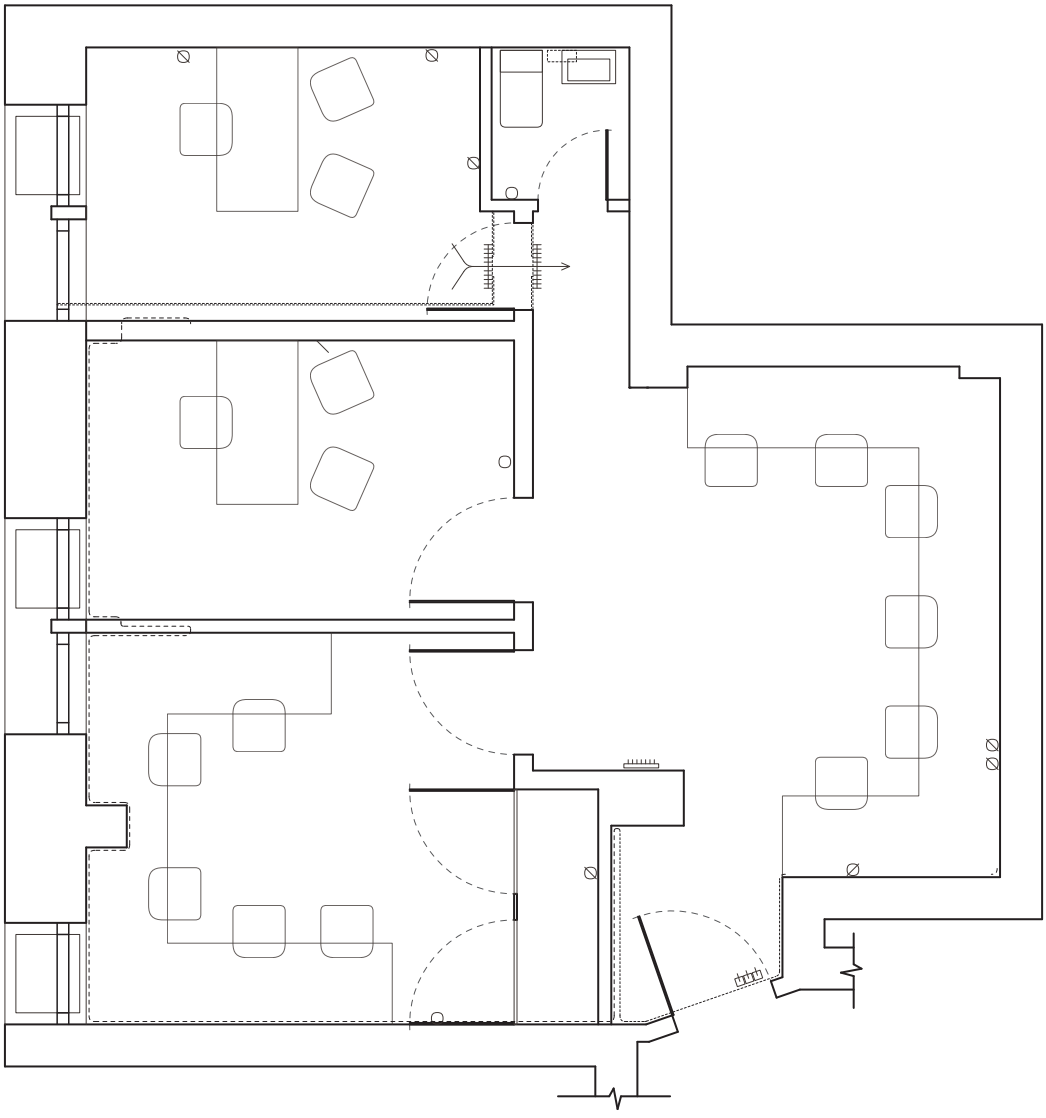
Scale: 1’ = 1/16”

Studio X - Beijing



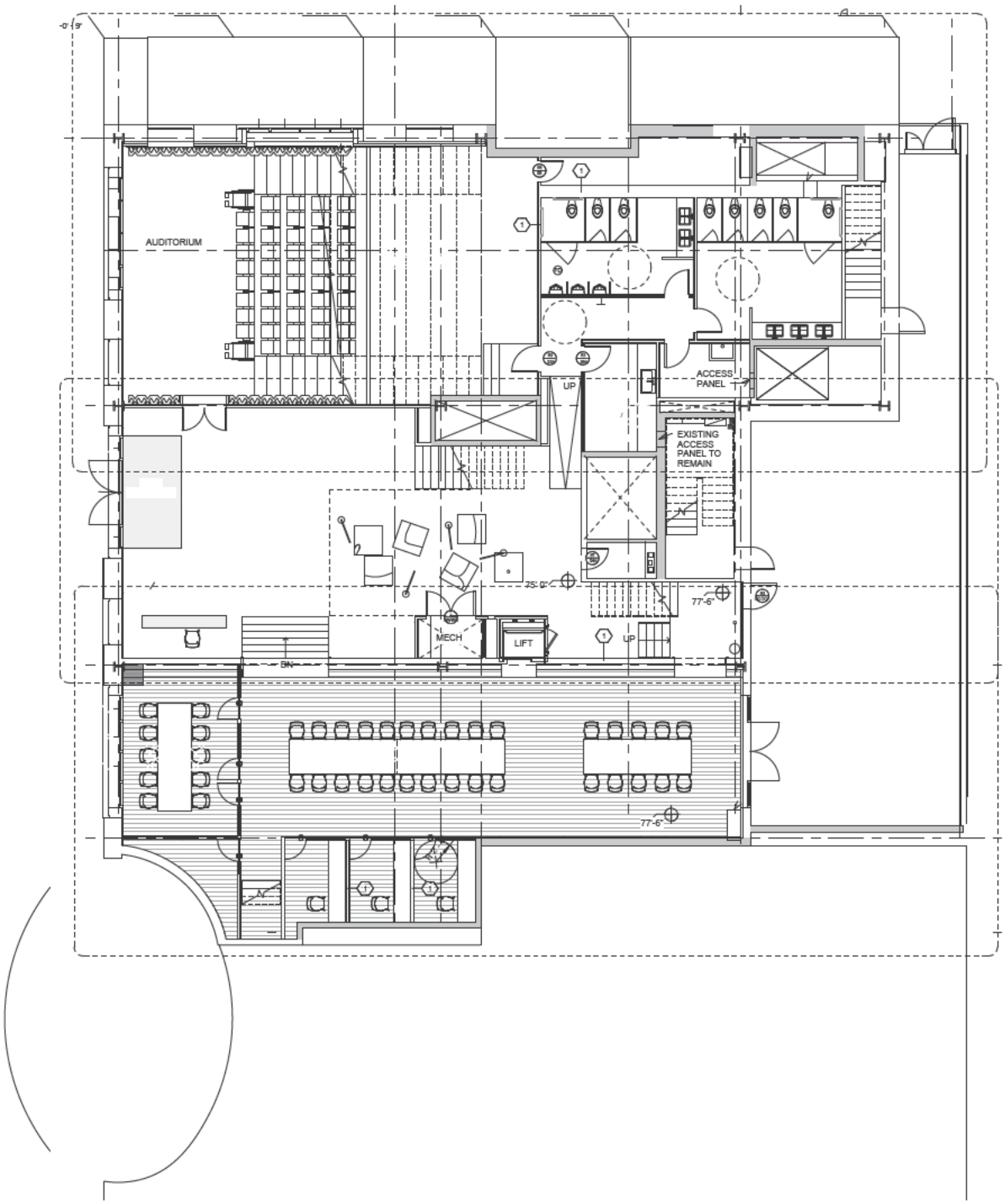
Scale: 1’ = 3/32”

Additional Office Space
Claremont Ave.



Scale: 1’ = 3/16”

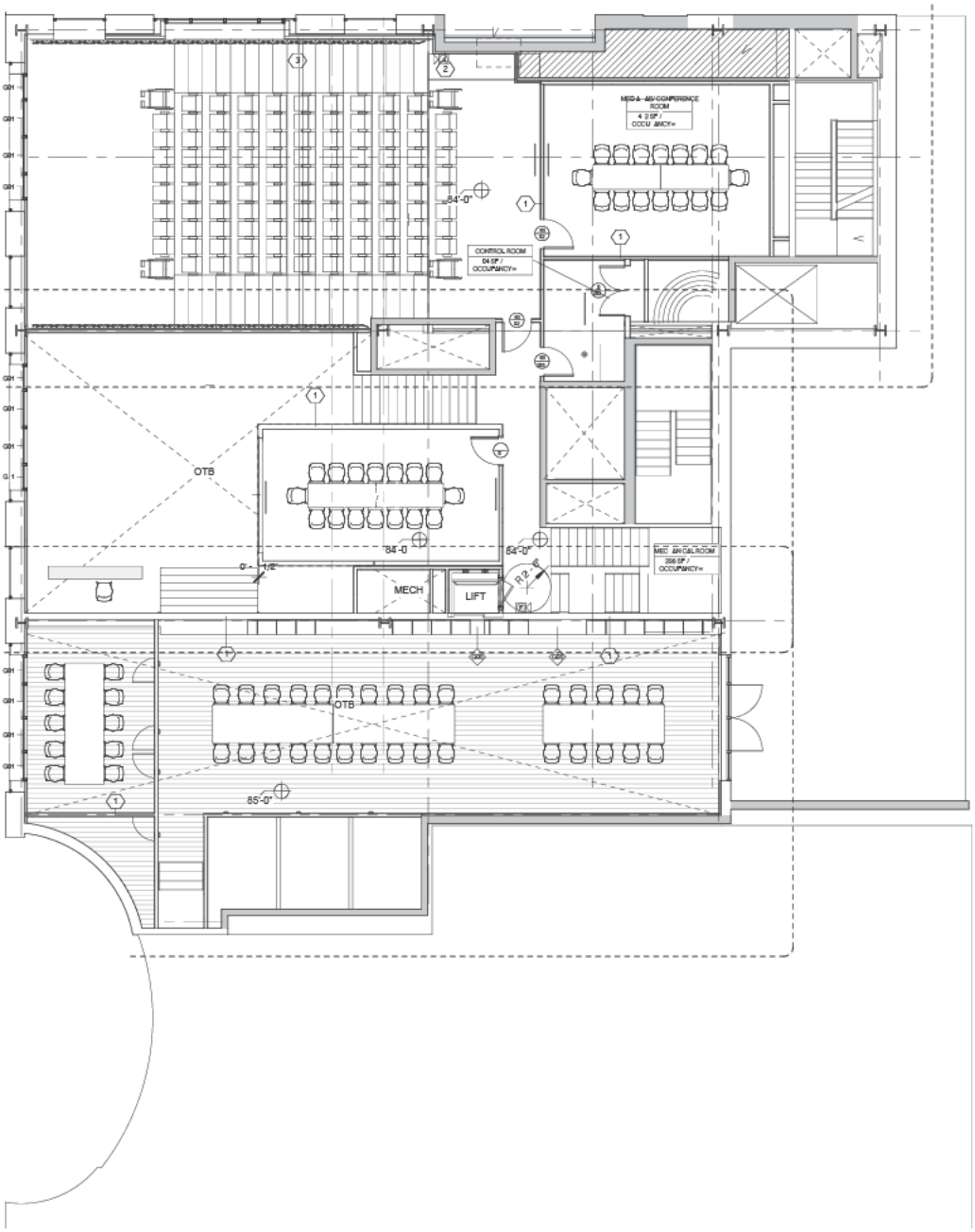
Center for Global Design and Development
Ground Level



Scale: 1’ = 1/16”

Center for Global Design and Development

Mezzanine Level



Scale: 1’ = 1/16”

APPENDIX 17: Matrix for Faculty Credentials

Fall 2011/ Spring 2012

	First Year						Second Year						Third Year			Varies
	Fall			Spring			Fall				Spring		Fall		Spring	
Faculty Member (alpha order)	**Summary of expertise, recent research, or experience (limit 25 words)**	A4001 Core Studio I	A4111 Architectural Technology I	A4348 History of Architecture I: 1700-1850	A4023 Architectural Drawing and Representation I	A4002 Core Studio II	A4112 Architectural Technology II	A4349 History of Architecture II:1850-1930	A4024 Architectural Drawing and Representation II	A4003 Core Studio III	A4113 Architectural Technology III	A4114 Architectural Technology IV	A4004 Advanced Studio IV	A4115 Architectural Technology V	A4005 Advanced Studio V	A4560 Professional Practice	A4006 Advanced Studio VI	Electives
Full-Time Faculty																		
Amale Andraos	Research focusing on the relationship between ecology and urbanism partly published in '49 Cities' book and shown					X									X			
Michael Bell	VisibleWeather. Received four Progressive Architecture Awards. Work exhibited																X	X
David Benjamin	Founder, The Living												X		X			X
Lise Anne Couture	Architecture. Mushenheim Fellow at the University of Michigan. Fellowship,														X			X
Kenneth	Architecture							X										X
Mario Gooden	Architects. Specializes in educational, commercial, civic, institutional and residential architecture.														X			X
Laurie Hawkinson	Hawkinson Architects LLP. Board of Directors, Architectural League of New York. 2007 AIA New York Chapter														X		X	
Juan Herreros	Arquitectos. 2008 RIBA Internacional Fellow, Royal Institute of British																X	X
Laura Kurgan	Principal, Laura Kurgan Design LLC. Director, Spatial Information Design Lab. Combines architectural research with design, information,									X			X					X
Reinhold Martin	Architects; Director, Temple Hoyne Buell Center for the Study of American Architecture,																	X
Mary McLeod	Council Fellow, France, 1977; Fulbright/Hayes, France, 1977. NEH, 1987; New York State Council on the Arts,			X														X
Kate Orff	LANDSCAPE ARCHITECTURE PLLC. Registered Architect.																	X

Fall 2011/ Spring 2012

		First Year								Second Year					Third Year			Varies
		Fall				Spring				Fall			Spring		Fall		Spring	
Faculty Member (alpha order)	**Summary of expertise, recent research, or experience (limit 25 words)**	A4001 Core Studio I	A4111 Architectural Technology I	A4348 History of Architecture I: 1700-1850	A4023 Architectural Drawing and Representation I	A4002 Core Studio II	A4112 Architectural Technology II	A4349 History of Architecture II:1850-1930	A4024 Architectural Drawing and Representation II	A4003 Core Studio III	A4113 Architectural Technology III	A4114 Architectural Technology IV	A4004 Advanced Studio IV	A4115 Architectural Technology V	A4005 Advanced Studio V	A4560 Professional Practice	A4006 Advanced Studio VI	Electives
Richard Plunz	~~Director, Urban Design~~ Program, Columbia														X			X
Hilary Sample	exhibited work at "Foreclosed: Rehousing the American Dream"									X								
Felicity Scott	Room. J. Paul Getty Postdoctoral Fellowship in the History of Art and the Humanities, 2002-2003; Henry Luce/ACLS Doctoral Dissertation Fellowship in American																	X
Galia Solomonoff	Director, Solomonoff Architecture Studio. McKim Prize for Excellence in Design, National Endowment for the Arts grant, 2000; Architectural Record Design Vanguard, 2003;	X											X					X
Bernard Tschumi	Tschumi Architects. Former Dean, Arts Council of Great Britain, 1975. National Endowment for the Arts, 1979. Member, College International de														X			X
Enrique Walker	Science in Advanced Architectural Design Program. Amongst his published work is Tschumi on Architecture:																X	X
Mark Wigley	Chicago Institute for Architecture and Urbanism, 1989; International Committee of Architectural Critics (C.I.C.A.) Triennial																	X
Mabel Wilson	MacCraken Fellowship, New York University, 1995; visiting scholar, Getty Research Institute, 2002. Member, American					X									X			X

Fall 2011/ Spring 2012

		First Year								Second Year					Third Year			Varies
		Fall				Spring				Fall			Spring		Fall		Spring	
Faculty Member (alpha order)	**Summary of expertise, recent research, or experience (limit 25 words)**	A4001 Core Studio I	A4111 Architectural Technology I	A4348 History of Architecture I: 1700-1850	A4023 Architectural Drawing and Representation I	A4002 Core Studio II	A4112 Architectural Technology II	A4349 History of Architecture II:1850-1930	A4024 Architectural Drawing and Representation II	A4003 Core Studio III	A4113 Architectural Technology III	A4114 Architectural Technology IV	A4004 Advanced Studio IV	A4115 Architectural Technology V	A4005 Advanced Studio V	A4560 Professional Practice	A4006 Advanced Studio VI	Electives
Gwendolyn Wright	Fellowship, 1977; Ford Foundation Fellowship, 1979-1980; NEH Fellowship, 1980-1982; Stanford Humanities Center Fellowship, 1982-1983; University of Michigan, Institute for the Humanities Fellowship, 1991; Getty																	X
Part-Time Faculty																		
Phillip Anzalone	research and curriculum related to applied and experimental building technology, digital design, fabrication and		X											X				
Erieta Attali	Architectural Photography, 2000-2001; Japan Foundation Artist Fellowship, 2002-																	X
Kutan Ayata	Young&Ayata.								X									
Mark Bearak	Architectures, NY. Registered Architect.																	X
Ezio Blasetti	Studio, Athens. Work exhibited at Centre Pompidou, Paris. Awarded at the 2008														X			X
Biayna Bogosian	Jacobs Architecture. Personal work exhibited internationally as part of the Machinic Processes installation, Architecture																	X
Brigitte Borders	Science Manager.																	X
Lynne Breslin	Architects. 2004 AIA Award (Dean House)																	X
Brian Brush	Partner, E/B Office.																	X
Babak Bryan	Partner, BanG studio. Lowenfish Award, 2004.								X									
Craig Buckley	at the GSAPP.																	X
Eric Bunge	nARCHITECTS PLLC. 2005 Canadian Professional Rome Prize																X	X
Nathan Carter	Science Manager.																	X
Christi Cheng	Toshiko Mori Architect.																	

Fall 2011/ Spring 2012

	First Year								Second Year					Third Year			Varies
	Fall				Spring				Fall			Spring		Fall		Spring	
Faculty Member (alpha order)	**Summary of expertise, recent research, or experience (limit 25 words)**	A4001 Core Studio I	A4111 Architectural Technology I	A4348 History of Architecture I: 1700-1850	A4023 Architectural Drawing and Representation I	A4002 Core Studio II	A4112 Architectural Technology II	A4349 History of Architecture II:1850-1930	A4024 Architectural Drawing and Representation II	A4003 Core Studio III	A4113 Architectural Technology III	A4114 Architectural Technology IV	A4004 Advanced Studio IV	A4115 Architectural Technology V	A4005 Advanced Studio V	A4560 Professional Practice	A4006 Advanced Studio VI	Electives
Kevin Cimini	Focuses on the research, development and integration of applied digital									**0**								**X**
Mark Collins	Studio. Partner, Morpholio. Designer and programmer investigating the culture																**X**	**X**
Robert Condon	Condon Architect.													**X**				
Lise Anne Couture	Architecture. Mushenheim Fellow at the University of Michigan. Fellowship,																	
Thomas de Monchaux	and theorist. Work published and reviewed in Log, Architectural Design, the New York Times, and The Wall									**X**							**X**	
Markus	studioMDA.														**X**		**X**	
Andrew Dolkart	Preservation Program. Association of American Publishers 1998 Award																	**X**
Zachary Downey	Data management for all processes directly related to the construction and facility																	**X**
Joshua Draper	PrePost. Exhibited at the Venice and Beijing Biennale and SFMoMA.																	**X**
Charles Eldred	Architect PLLC.									**X**								
David Fano	Partner, Case Inc.				**X**													**X**
Sean Gallagher	Scofidio + Renfro. McGraw Hill's & New York Construction																	**X**
Douglas Gauthier	Gauthier Architects. Featured in Architectural Record's Design Vanguard; Architecture Magazine for a Visionary									**X**								**X**
Frank Gesualdi	York. Work focused on responsive design concepts and building								**X**									

Fall 2011/ Spring 2012

		First Year								Second Year					Third Year			Varies
		Fall				Spring				Fall			Spring		Fall		Spring	
Faculty Member (alpha order)	**Summary of expertise, recent research, or experience (limit 25 words)**	A4001 Core Studio I	A4111 Architectural Technology I	A4348 History of Architecture I: 1700-1850	A4023 Architectural Drawing and Representation I	A4002 Core Studio II	A4112 Architectural Technology II	A4349 History of Architecture II:1850-1930	A4024 Architectural Drawing and Representation II	A4003 Core Studio III	A4113 Architectural Technology III	A4114 Architectural Technology IV	A4004 Advanced Studio IV	A4115 Architectural Technology V	A4005 Advanced Studio V	A4560 Professional Practice	A4006 Advanced Studio VI	Electives
Alastair Gill	Productions Ink; ipi-Go Research on the use of advanced Gaming Softwares to question ideas of public space																	X
Leslie Gill	Emerging Voices Award, Architectural League of New York, 1992. Vice chair, Van Alen Institute; trustee, The Cooper														X			
Cristina Goberna	Architectural Agonism. Curator and Manager, Van Alen Books, Van Alen Institute. Winner of					X												
Jennifer Gray	Department of Education, The Museum of Modern Art. Recipient of the Presidential Fellowship, Columbia University. Carter Manny																	X
Mark Green	Inc, New York. Directs B M and parametric design related projects																	X
Toru Hasegawa	Studio. Partner, Morpholio. Designer and programmer investigating the culture																X	X
Robert Heintges	Heintges & Associates. Building envelope and curtain wall consultant.																	X
Arthur Jay Hibbs	Architects, New York.											X		X				
Mimi Hoang	nARCHITECTS PLLC																X	
Phu Hoang	York/London. The New York Architectural League Young Architects Forum, 2009. Uses “current political																X	
Steven Holl	Architects. Multiple prestigious national/international awards. Selected Projects: Simmons Hall														X			
Jyoti Hosagrahar	historian, engaged with planning, design, and policies on urban development, urban conservation and																	X

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	First Year								Second Year					Third Year			Varies
	Fall				Spring				Fall			Spring		Fall		Spring	
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Chris Hoxie	Focuses on the research, development and integration of applied digital																	X
Scott Hughes	Silman Associates.													X				
Jeffrey Inaba	Founding Director of C-LAB																X	X
Jason Ivaliotis	Director, Versa Design; Architect III, HNTB																	X
Michael Jacobs	Architecture. 2007 AIA San Fernando Valley Design Award, 2003 AIA Los Angeles "NextLA"														X			
Jeffrey Johnson	China Lab, GSAPP.									X							X	X
Lydia Kallipoliti	EcoRedux Network; Senior Associate, Cooper Union Institute of	X																
Keith Kaseman	Memorial competition, 2003.														X		X	X
Nico Kienzl	New York. Application of advanced building analysis including facade optimization,						X											
Janette Kim	the Above; Director, Urban Landscape Lab, GSAPP. Focus on the construction of ecologies in relationship to public	X											X					X
Karel Klein	Emerging Voices Award, The Architectural League of New York, 2011; Avant Guardian Award, Most Innovative					X												
Craig Konyk	architecture pc.												X		X			X
Zachary Kostura	Arup																	X
Kunio Kudo	Science Research Fellow, University of Pennsylvania, 1969-1971; American Study														X			X
Christoph Kumpusch	productions; Director / Partner, ForwardSlash.	X				X												
Wilfried Laufs	Owner & Principal, Laus Engineering Design LLC.										X							
Thomas Leeser	Architecture														X			

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		Fall				Spring				Fall			Spring		Fall		Spring	
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Frederic Levrat	Levrat Design, New York; Best 6 Young American Architects, the									X							X	
Kevin Lichten	Architects LLP											X		X				
Giuseppe Lignano	EK; Adaptive reuse ("upcycling") of existing industrial objects and systems not originally									X							X	
Geoff Manaugh	Wired UK; Co-Director, Studio X-NYC.																X	
Scott Marble	Marble Fairbanks; Young Architects, Architectural League of New York, 1992; A.I.A.												X					X
Robert Marino	Founder and Principal, Robert Marino Architects									X			X					
Juergen Mayer	Architects, Berlin																X	
Adam Modesitt	SHoP Architects.																	X
John Morrison	Lewis.Tsurumaki Lewis.								X									
Davidson Norris	Norris Architect. Principal, Carpenter Norris Consulting.																	X
Philip Parker	Architects. Registered Architect.	X																
Amanda Parkes	Studio; Research involves alternative																	X
Raj Patel	Research involves Acoustics																	X
Jennifer Preston	Director, BKSK Architects					X												
Nicholas Quennell	Rothschild & Partners. Recipeint of several AIA Design Awards.																	X
Mark Rakatansky	Rakatansky Studio.	X				X												
Francois Roche	territories. Co-founder and Principal, R&Sie(n). Co-founder, [eIf/bʌt/c]#. Recipient of Chevalier des Arts et des Lettres														X			
Michael Rock	Architecture Project. Parnter, 2x4 Inc., New																	X
Karla Rothstein	founder, Latent Productions. Registered					X									X			
Lindy Roy	Design; 2001 MoMA/P.S.1 Young Architect program																X	

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Westley Rozen	Partner, SITU Studio																	X
Yehuda Safran	Consultant to Steven Holl Architects. Director, Potlatch Art and														X			X
Jose Sanchez	Biothing with Alisa Andrasek. Founder,																	X
Victoria Sanger	specialized in colonial, post-colonial and military urbanism.																	X
Yoshiko Sato	Principal, Morris Sato Studio. Recipient of the Paris Prize in	X											X					
Edwin Schlossberg	Designer, ESI Design. A pioneer in the design of collaborative public experiences and																	X
Laila Seewang	Architect. Her current research centers on theories of urban design, specifically the political and social effects of					X												
Paul Segal	Consultant, Paul Segal FAIA. President, New York Chapter, A.I A., 1985-1986; trustee, Preservation League of New York State;																	X
David Shane	Academic and Published Author of recombinat Urbanism; Conceptual Modeling in Architecture,																	X
Cassim Shepard	He produces non-fiction media --- most often in prose, film or video ---																	X
Daniel Sherer	History of Art, Harvard, 1992-1995; Charles Eliot Norton Travelling Fellow, Harvard, 1993; Oscar																	X
Sho Shigematsu	Metropolitan Architecture. Director of OMA New York. Partner in charge of Cornell University's new building for the College of Architecture, Art and																X	

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Roland Snooks	Founding Partner of Kokkugia. Designer and programmer focused on emergent design methodologies involving																	X
Morana Stipisic	Urban Design Lab.																	X
John Szot	Foundry. Principal, John Szot Studio. One of the executive directors of the Experimental Modern																	X
Benedetta Tagliabue	Tagliabue EMBT. Award-winning architect recipient of the RIBA Stirling Prize 2005, the Centenary Medal from Edinburgh Architectural Association and the														X			
Mark Taylor	Columbia University.																	X
Caterina Tiazzoldi	Principal, Nuova Ordentra, Torino, Italy. Director of the Research Lab NSU at Columbia																	X
Ada Tolla	EK; Adaptive reuse ("upcycling") of existing industrial objects and systems not originally									X							X	
Paula Tomisaki	Recipient of the Smart Geometry Group scholarship in 2007 to	X																
Nicola Twilley	Director, Studio-X NYC.																	X
Christian Uhl	Miller + Hawkinson Architects.														X			
Joshua Uhl	Toshiko Mori Architect. McKim/Kaplan Prize, 2002; SOM Traveling Fellowship, 2002.				X													X
Kazys Varnelis	UDC Director of Network Architecture Lab. His research focuses on contemporary architecture, late modernism, architecture												X					X
Joseph Vidich	PrePost. Exhibited at the Venice and Beijing Biennale and SFMoMA.																	X

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David Wallance	Wallance Architect PLLC. Member, A.I.A.											X		X				X
Mark Wasiuta	House of Architecture. Hi research focuses on the architectural turn to "environment" in the post-war, from the discourse on environmental design, to social theories of environment and																X	X
George Wheeler	Metropolitan Museum of Art. Consulting Conservator, Isamu Noguchi Foundation. Director of Scientific Research, Art2Facts. Consulting Conservator, Villa La Pietra, Florence,																	X
Chris (John) Whitelaw	Consulting Conservator, Isamu Noguchi																	X
Sarah Williams	Information Design Lab, Columbia University. Researcher and programmer focusing on innovative mapping and																	X
T. Kelly Wilson	Principal, Studio 922. Paul Rudolph Fellowship								X									
Bryan Young	Projects LLC.								X									
Michael Young	Architect and educator exploring novel formal and organizational possibilities in architecture and urbanism, departing from historical processes								X									X

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Full-Time Faculty																		
Michael Bell	VisibleWeather. Received four Progressive Architecture Awards. Work exhibited at the Venice Biennale and MoMA's Foreclosed									X							X	X
David Benjamin	Founder, The Living. Director of C-BIP.												X		X			X
Kenneth Frampton	Architecture							X										X
Mario Gooden	Principal, Huff + Gooden Architects. Specializes in educational, commercial, civic, institutional and residential architecture.														X		X	X
Laurie Hawkinson	Hawkinson Architects LLP. Board of Directors, Architectural League of New York. 2007 AIA New York Chapter Architecture Award and														X		X	
Juan Herreros	Arquitectos. 2008 RIBA Internacional Fellow, Royal Institute of British																X	
Laura Kurgan	Principal, Laura Kurgan Design LLC. Director, Spatial Information Design Lab. Combines architectural research with design, information, communication,									X			X					X
Reinhold Martin	Architects; Director, Temple Hoyne Buell Center for the Study of American Architecture, Columbia University;														X			X

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Mary McLeod	Research Council Fellow, France, 1977; Fulbright/Hayes, France, 1977. NEH, 1987; New York State Council on the Arts, 1998; Graham Foundation for			X														X
Kate Orff	LANDSCAPE ARCHITECTURE PLLC. Registered Architect.														X			X
Richard Plunz	Director, Urban Design Program, Columbia														X			X
Hilary Sample	exhibited work at "Foreclosed: Rehousing the American Dream"																	
Felicity Scott	Room. J. Paul Getty Postdoctoral Fellowship in the History of Art and the Humanities, 2002-2003; Henry Luce/ACLS Doctoral Dissertation Fellowship in American Art, 1998-1999; Harold																	X
Galia Solomonoff	Director, Solomonoff Architecture Studio. McKim Prize for Excellence in Design, National Endowment for the Arts grant, 2000; Architectural Record Design Vanguard, 2003; Architectural League Emerging Voices, 2002.												X					X
Bernard Tschumi	Tschumi Architects. Former Dean, Arts Council of Great Britain, 1975. National Endowment for the Arts, 1979. Member, College International de Philosophie, Chevalier des Arts et des Lettres,														X			X

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Enrique Walker	Science in Advanced Architectural Design Program. Amongst his published work is Tschumi on Architecture: Conversations with																X	X
Mark Wigley	Director of Scientific Research, Art2Facts, New York, 1997-Present																	X
Mabel Wilson	MacCraken Fellowship, New York University, 1995; visiting scholar, Getty Research Institute, 2002. Member,														X			X
Gwendolyn Wright	Fellowship, 1977; Ford Foundation Fellowship, 1979-1980; NEH Fellowship, 1980-1982; Stanford Humanities Center Fellowship, 1982-1983; University of Michigan, Institute for the Humanities Fellowship, 1991; Getty Center for the History of Art and the Humanities Fellowship, 1992-1993;																	X
Part-Time Faculty																		
Chris Andreacola	Senior Associate, Diller Scofidio + Renfro.													X				
Phillip Anzalone	research and curriculum related to applied and experimental building technology, digital design, fabrication and assembly techniques.	X	X											X				
Benjamin Aranda	Founding principal, Aranda/Lasch. Young Architects Award 2007. United States Artist														X			

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Erieta Attali	Architectural Photography, 2000-2001; Japan Foundation Artist Fellowship, 2002-2003; Graham																	X
Kutan Ayata	Young&Ayata.								X									
Mark Bearak	Architectures, NY. Registered Architect.																	X
Markus Dochantschi	studioMDA.														X			
Andrew Dolkart	Preservation Program. Association of American Publishers 1998 Award																	X
Zachary Downey	Data management for all processes directly related to the construction and facility																	X
Joshua Draper	PrePost. Exhibited at the Venice and Beijing Biennale and SFMoMA.																	X
David Fano	Partner, Case Inc.				X													X
Michelle Fornabai	Principal, ambo:infra												X					
Ezio Blasetti	Studio, Athens. Work exhibited at Centre Pompidou, Paris. Awarded at the 2008														X			X
Biayna Bogosian	Jacobs Architecture. Personal work exhibited internationally as part of the Machinic Processes installation, Architecture Biennial Beijing (October																	X
Brigitte Borders	Lab for Applied Building Science Manager.																	X
Lynne Breslin	Architects. 2004 AIA Award (Dean House)																	X
Brian Brush	Partner, E/B Office.																	X
Babak Bryan	Partner, BanG studio. Lowenfish Award, 2004.								X									
Craig Buckley	Director of Publications at the GSAPP.																	X

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Eric Bunge	nARCHITECTS PLLC. 2005 Canadian Professional Rome Prize recipient.																X	
Nathan Carter	Lab for Applied Building Science Manager.																	X
Christy Cheng	Project Architect, Toshiko Mori Architect.																X	
Kevin Cimini	Focuses on the research, development and integration of applied digital technologies in the									0								X
Mark Collins	Studio. Partner, Morpholio. Designer and programmer investigating the culture of innovation and																X	X
Robert Condon	Owner, Robert S. Condon Architect.													X				
Yolande Daniels	Partner, SUMO					X												X
Thomas de Monchaux	and theorist. Work published and reviewed in Log, Architectural Design, the New York Times, and The Wall Street Journal; exhibited									X							X	
Hernan Diaz-Alonso	Xefirotarch																X	
Douglas Gauthier	Gauthier Architects. Featured in Architectural Record's Design Vanguard; Architecture Magazine for a Visionary Architecture Citation and in Time Magazine:									X								
Frank Gesualdi	York. Work focused on responsive design concepts and building								X									

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Alastair Gill	Productions Ink; ipi-Go.Research on the use of advanced Gaming Softwares to question ideas of public space and the generation of														X			X
Cristina Goberna	Architectural Agonism. Curator and Manager, Van Alen Books, Van Alen Institute. Winner of EUROPAN 7 and 8					X												
Mark Green	Inc, New York. Directs BIM and parametric design related projects for AEC firms.																	X
Toru Hasegawa	Studio. Partner, Morpholio. Designer and programmer investigating the culture of innovation and																X	X
Robert Heintges	Heintges & Associates. Building envelope and curtain wall consultant.																	X
Arthur Jay H bbs	Principal, Hibbs Architects, New York.													X				
Mimi Hoang	Founding Principal, nARCHITECTS PLLC																X	
Jyoti Hosagrahar	historian, engaged with planning, design, and policies on urban development, urban conservation and heritage management,																	X
Chris Hoxie	Focuses on the research, development and integration of applied digital technologies in the																	X
Scott Hughes	Associate, Robert Silman Associates.														X			

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Jeffrey Inaba	Founder and Principal, NABA Inc. Features Editor, Volume																X	X
Jason Ivaliotis	Director, Versa Design; Architect III, HNTB Architecture.																	X
Jeffrey Johnson	Founding Director of China Lab, GSAPP.	X															X	X
Lydia Kallipoliti	EcoRedux Network; Senior Associate, Cooper Union Institute of Sustainable Design.														X			
Keith Kaseman	Memorial competition, 2003.														X		X	X
Nico Kienzl	New York. Application of advanced building analysis including facade optimization, daylight and shading.						X											
Janette Kim	the Above; Director, Urban Landscape Lab, GSAPP. Focus on the construction of ecologies in relationship to public identity, opinion, and	X																X
Karel Klein	Emerging Voices Award, The Architectural League of New York, 2011; Avant Guardian Award, Most Innovative						X											
Craig Konyk	architecture pc.														X			X
Zachary Kostura	Arup																X	X
Kunio Kudo	Science Research Fellow, University of Pennsylvania, 1969-1971; American Study Fellow, Brown, 1977-																	X
Christoph Kumpusch	productions; Director / Partner, ForwardSlash.	X					X											
Marc Kushner	Partner, HWKN (HollwichKushner); CEO, Architizer.																X	

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Wilfried Laufs	Engineering Design LLC.										X							
Thomas Leeser	Architecture														X			
Jennifer Leung	Graham Foundation, 2007. Grant Recipient, Penn Institute for Urban Research, 2007. Residency Fellowship, The MacDowell Colony, 2011. Residency Fellowship, Vermont								X									
Frederic Levrat	Levrat Design, New York; Best 6 Young American Architects, the New York Architectural									X							X	
Kevin Lichten	Principal, Lichten Craig Architects LLP											X		X				
Giuseppe Lignano	EK; Adaptive reuse (“upcycling”) of existing industrial objects and systems not originally intended for architecture.									X							X	
Radhi Majmudar	Partner, PENCIL. Executive Consultant, Accounts Receivable Advisor, Transworld Systems. Founder and Principal, Innovative																	X
Scott Marble	Marble Fairbanks; Young Architects, Architectural League of New York, 1992; A.I.A. Design Award, 1994,												X					X
Robert Marino	Founder and Principal, Robert Marino Architects					X				X								
Juergen Mayer	Principal of J. MAYER H. Architects, Berlin																X	
Adam Modesitt	Architectural Designer, SHoP Architects.																	X
John Morrison	Associate, Lewis.Tsurumaki.Lewis.								X									

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Joaquim Moreno	Curator, Portuguese representation at the Venice biennial, 2008.	X																
Davidson Norris	Norris Architect. Principal, Carpenter Norris Consulting. Registered Architect.																	X
Philip Parker	Architects. Registered Architect.	X																
Amanda Parkes	Studio; Research involves alternative sources of Energy																	X
Raj Patel	Research involves Acoustics																	
Jennifer Preston	Director, BKSK Architects																	
Joshua Prince-	Registered Architect																X	
Nicholas Quennell	Rothschild & Partners. Recipeint of several AIA Design Awards. Regsitered Landscape																	X
Mark Rakatansky	Rakatansky Studio.	X				X												
Francois Roche	territories. Co-founder and Principal, R&Sie(n). Co-founder, [eIf/bʌt/c]#. Recipient of Chevalier des Arts et des Lettres and Album de la Jeune														X			
Michael Rock	Architecture Project. Parnter, 2x4 Inc., New York,																	X
Karla Rothstein	founder, Latent Productions. Registered Architect.					X				X								
Lindy Roy	Design; 2001 MoMA/P.S.1 Young Architect program														X			
Yehuda Safran	Co-Founder, Director, Potlatch Art and														X			X

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Jose Sanchez	Biothing with Alisa Andrasek. Founder,																	X
Victoria Sanger	specialized in colonial, post-colonial and military urbanism.																	X
Yoshiko Sato	Principal, Morris Sato Studio. Recipient of the Paris Prize in	X											X					
Edwin Schlossberg	Designer, ESI Design. A pioneer in the design of collaborative public experiences and																	X
Paul Segal	Consultant, Paul Segal FAIA. President, New York Chapter, A.I.A., 1985-1986; trustee, Preservation League of New York State; president, New York																	X
David Shane	Academic and Published Author of recombinat Urbanism; Conceptual Modeling in Architecture, Urban Design and City																	X
Cassim Shepard	He produces non-fiction media --- most often in prose, film or video --- about cities, buildings																	X
Daniel Sherer	History of Art, Harvard, 1992-1995; Charles Eliot Norton Travelling Fellow, Harvard, 1993; Oscar Cutler Fellow, Harvard,																	X
Sho Shigematsu	Metropolitan Architecture. Director of OMA New York. Partner in charge of Cornell University's new building for the College of Architecture, Art and Planning and project																X	

Fall 2010/ Spring 2011

		First Year						Second Year							Third Year			
		Fall				Spring				Fall			Spring		Fall		Spring	Varies
Faculty Member (alpha order)	**recent research, or experience (limit 25 words)**	A4001 Core Studio I	A4111 Architectural Technology I	A4348 History of Architecture I: 1700-1850	A4023 Arch Drawing and	A4002 Core Studio II	A4112 Arch Tech II	A4349 History of Arch II:1850-	A4024 Arch Drawing and	A4003 Core Studio III	A4113 Architectural Technol	A4114 Architectural Technolo	A4004 Advanced Studio IV	A4115 Architectural Technology V	A4005 Advanced Studio V	A4560 Professional Practice	A4006 Advanced Studio VI	Electives
Roland Snooks	Founding Partner of Kokkugia. Designer and programmer focused on emergent design methodologies involving genetic and agent-based																	X
Morana Stipisic	Research Advisor, Urban Design Lab.																	X
John Szot	Foundry. Principal, John Szot Studio. One of the executive directors of the Experimental Modern Arts Collective.																	X
Benedetta Tagliabue	Tagliabue EMBT. Award-winning architect recipient of the RIBA Stirling Prize 2005, the Centenary Medal from Edinburgh Architectural Association and the 2005 Spanish National Architecture Prize														X			
Caterina Tiazzoldi	Principal, Nuova Ordentra, Torino, Italy. Director of the Research Lab NSU at Columbia University. Post Doc																	X
Ada Tolla	EK; Adaptive reuse ("upcycling") of existing industrial objects and systems not originally intended for architecture.									X							X	
Marc Tsurumaki	Principal and Founding Partner, Lewis.Tsurumaki.Lewis. Trustee of the Van Alen Institute 2002-2011. General Services Administration National Peer. 2007 National Design Award for Interior Design from the Cooper-												X					

Fall 2010/ Spring 2011

		First Year								Second Year						Third Year			
		Fall				Spring				Fall			Spring			Fall		Spring	Varies
Faculty Member (alpha order)	**recent research, or experience (limit 25 words)**	A4001 Core Studio I	A4111 Architectural Technology I	A4348 History of Architecture I: 1700-1850	A4023 Arch Drawing and	A4002 Core Studio II	A4112 Arch Tech II	A4349 History of Arch II:1850-	A4024 Arch Drawing and	A4003 Core Studio III	A4113 Architectural Technol	A4114 Architectural Technolo	A4004 Advanced Studio IV	A4115 Architectural Technology V	A4005 Advanced Studio V	A4560 Professional Practice	A4006 Advanced Studio VI	Electives
Joshua Uhl	Toshiko Mori Architect. McKim/Kaplan Prize, 2002; SOM Traveling Fellowship, 2002. Member, AIA.				X													X
Kazys Varnelis	UDC.Director of Network Architecture Lab. His research focuses on contemporary architecture, late modernism, architecture and capitalism, and the impact of changes in telecommunications and												X					X
Joseph Vidich	PrePost. Exhibited at the Venice and Beijing Biennale and SFMoMA.																	X
David Wallance	Wallance Architect PLLC. Member, A.I A. Registered architect.											X		X				
Mark Wasiuta	House of Architecture. His research focuses on the architectural turn to “environment” in the post-war, from the discourse on environmental design, to social theories of environment and behavior, and to					X												X
George Wheeler	Metropolitan Museum of Art. Consulting Conservator, Isamu Noguchi Foundation. Director of Scientific Research, Art2Facts. Consulting Conservator, Villa La Pietra, Florence, taly. Chair of the 12th International Conference																	X

Fall 2010/ Spring 2011

		First Year							Second Year						Third Year			
		Fall				Spring			Fall				Spring				Fall	Spring	Varies
Faculty Member (alpha order)	**recent research, or experience (limit 25 words)**	A4001 Core Studio I	A4111 Architectural Technology I	A4348 History of Architecture I: 1700-1850	A4023 Arch Drawing and	A4002 Core Studio II	A4112 Arch Tech II	A4349 History of Arch II:1850-	A4024 Arch Drawing and	A4003 Core Studio III	A4113 Architectural Technol	A4114 Architectural Technolo	A4004 Advanced Studio IV	A4115 Architectural Technology V	A4005 Advanced Studio V	A4560 Professional Practice	A4006 Advanced Studio VI	Electives
Chris (John) Whitelaw	Consulting Conservator, Isamu Noguchi Foundation, New York,																	X
Sarah Williams	Consulting Conservator, Villa La Pietra, Florence, taly, 1997-Present																	X
T. Kelly Wilson	Principal, Studio 922. Paul Rudolph Fellowship at Auburn University.								X									x
Soo-in Yang	Principal Designer, Soo-in Yang Design, Seoul,									X							X	
Bryan Young	Projects LLC.								X									
Michael Young	Architect and educator exploring novel formal and organizational possibilities in architecture and urbanism, departing from historical processes towards an engagemen with cultural issues that								X									

APPENDIX 18: GSAPP Software List

List of Current GSAPP Software (versions pending) in alphabetical order:

Adobe Acrobat Professional
Adobe After Effects
Adobe Bridge
Adobe Dreamweaver
Adobe Encore
Adobe Extend Script Toolkit
Adobe Extension Manager
Adobe Fireworks
Adobe Flash
Adobe Illustrator
Adobe InDesign
Adobe Photoshop
Adobe Premier Pro
AGI32
ArcGIS ArcCatalog
ArcGIS ArcGlobe
ArcGIS ArcMap
ArcGIS ArcReader
ArcGIS ArcScene
AutoCAD Mechanical
Autodesk 3DS Max
Autodesk AutoCAD
Autodesk AutoCAD Architecture
Autodesk Design Review
Autodesk Ecotect 2011
Autodesk Inventor
Autodesk Maya
Autodesk Navisworks Manage/Freedom
Autodesk Revit
Autodesk Robot Structural Analysis
Autodesk Vault (part of Mechanical)
Beam Pro
Bentley Generative Componenents
Bentley MicroStation
Bentley Triforma
CamStudio
Catia
DataFerrett
Deadline
DNR Garmin
Endnote
Equest
Export to KML 9 (for google earth)
Feature Analyst for ArcGIS
Flamingo Rhino plugin
Flash Player
Flipshare (for AV cameras)
Flow
Fortres 101
Geospatial Modeling Env. (formerly Hawth Analysis)

Google Earth Pro
Google Sketchup Plugin for ArcGIS
Google Sketchup Pro
GPS for DNR Garmin
Grasshopper Rhino plugin
GSpot
IDRISI Taiga
Illustrate plugin 3dsMax
Internet Explorer
java
KML to SHP
LBNL Software Optics5
LBNL Software Therm
LBNL Software Therm 6
LBNL Software Window
LUM client Tools for CATIA
Mastercam X
Microsoft Office Access
Microsoft Office Excel
Microsoft Office InfoPath
Microsoft Office OneNote
Microsoft Office PowerPoint
Microsoft Office Publisher
Microsoft Office Word
ModeFrontier
Monkey Rhino plugin
pdplayer
PowerDVD
Print Manager Plus Client
Processing
Python
Quicktime (pro)
Rhino
Roxio Creator
Sassafras Keyserver
Shockwave Player
Sketchup Layout 2
Sketchup Style Builder
Solar Tool (Ecotect)
Solidworks
Solidworks 2D Editor (formerly DWG Editor)
Solidworks DWG TruView
Solidworks eDrawings
Solidworks Viewer
Stata
StuffIt Expander
Symantec Endpoint Protection
Symantec Ghost Client
Theorica Divx Codecs
V-Ray and V-Ray RT plugin for 3dsMax
V-Ray plugin for Rhino
V-Ray RT for 3dsMax
Weather Tool (Ecotect)
Windows Media Player
WinSCP

WinZip 14 Pro
WSUS Client
XTools Pro

APPENDIX 19: Employers where recent GSAPP alumni work

The following list includes a selection of offices/organizations where recent GSAPP alumni currently work.

1:1:6 Technologies Incorporated	Fgh Investing	Parsons Brinckerhoff
2mission Design and Development	Flank	PBC Architecture
5DESIGN	Ford, Powell and Carson, Inc.	Pei Cobb Freed and Partners Architect
A Mazor- A First Architects & City	Forest City Ratner Companies	Pei Partnership Architects
Planners	Forest City Residential, Inc.	PEM Arquitectura
A. J. Silverman LLC	Forest City Washington	Perimeter Architects, LLC.
A/S/G Inc.	Formus Inc.	Perkins & Will
Abraaj Capital	Fram Management	Peter Eisenman
Abramson Teiger Architects	Francis Repas Architecture	PFAU Architecture
Academy of Fine Arts	FTL Design Engineering Studio	Philip Edwards
Academy of Fine Arts, Institute for	Galerias Chippendale	Picerne Real Estate Group
Architecture	Garrison Architects	Pitney Bowes, Inc.
ADG Development, LLC	GE Capital Real Estate	Platt Byard Dovell White Architects
Advance Realty Group	GE Commercial Finance	PLC Investments, Inc.
Aedilis Preservation ltd.	Gehry Partners LLP	pod design
Agence Perrot	Gensler	POD Design Media
AHC, Inc.	Gernot Riether Studio	Popular Architecture
AKRF, Inc.	Getty Conservation Institute	Portico Residential LLC/Portico Real
ALBAs	GGA	Estate Investments LLC
Alejandro Ortiz Architects, Inc.	Global Green USA	Poshek Partnership LLP
Alliance for Downtown New York	Global Real Estate	Pratt Institute
Inc.	GMI Inc.	Precipice Design Studio
Alliance Residential	Goldman Properties	Preserv Inc.
Allies and Morrison Architects	Graduate School of Public Affairs	PricewaterhouseCoopers
ALS Design	Grand Heritage Hotel Group	Princeton University
AMB BlackPine	Grand River Investments Limited	Probehead LLC
American International Group, Inc.	Greenberg & Farrow	Project for Public Spaces
Americo Vespucio	Greenberg Farrow Architecture	Prudential Real Estate Investments
Anacostia Waterfront Corporation	Greenwich Village Society for	PXS
Andre Soluri, Architect	Historic Preservation	Qua'Virarch
Andres Frugone Domke Arquitecto	Grimshaw	Rafael Vinoly Architects PC
Archipelagos	Gruen Associates	Rand Engineering & Architecture, PC
Architectural Association	Gruzen Samton, LLP	RBSCC
Arch-Tectonics	Guerin Glass Architects	Red Brick Financial LLC
Arizona State University	Gwathmey-Siegel Associates	RFR Holding LLC
ArqiVOLTA Design	H & H Development	Richard Dattner Architects
Artech Inc.	Haigo Shen International	Richman Housing Resources LLC
Artimus Construction and	Engineering Con	Richmond American Homes, Inc.
Development Inc.	Hamilton Associates	Riverfront Park
ASG Real Estate Services	Hamilton, Rabinovitz & Alschuler	Robert A.M. Stern Architects, LLP
Asian Americans for Equality	Handel Architects	Robert Charles Lesser and Company,
Associated Consultants	Handel Architects LLP	LLC
Associated Fabrication LLC	Harvard University	Robert Krone Architect, P.C.
Asymptote Architecture	Health Science Consultant Group	Robert Siegel Architects
Atsunobu Maeda Architects	Hellmuth Obata + Kassabaum	Robert Silman Associates
Avalon Bay Communities	Hersha Development	Robinson & Associates, Inc.
Aybar Mateos Arquitectos	Hewitt Architects, Inc.	Rogers Marvel Architects, PLLC
Baier Bischofberger GmbH	HHPA	Ronald Lu and Partners (HK) LTD.
Balmori Associates, Inc.	Higgins and Associates	Roy Design
Bank of America	Higgins and Quasebarth	R-Project Co.Ltd
Bank of New York (Inactive)	Higgins Purchasing Group	RRSK Studio
Bayernareal Immobilien	Hillier Architecture	Ryan Associates
BayRock Residential, LLC	Hines	Ryan LLC
Bennett Holdings, LLC	HOK	Salles Schaffer
Bentall Real Estate Services	Holabird & Root Architects	Samsung Construction Co.
Berryplans, LLC	Housing Works	Samsung Everland Inc.
Beyer Blinder Belle Architects and	Howard L. Zimmerman Architects,	Samuel H. Kress Foundation
Planning	P.C.	San Francisco Mayor's Office of Housing
BFJ Planning	Hudson Yards Development	SB Architects

Blu Development	Corporation	Second Avenue Subway Project
Bluesky Studios	Humphries Poli Architects	SellDorf Architects
BMP Project Consulting (Shanghai)	Hury Q Ho Architects	SFDCO
Co. Ltd.	I. M. Pei Architect	Shogo Iwata Architects
Bond Street Architecture & Design	IAC/InterActiveCorp	SHoP architects
Bone/Levine Architects	IC Gesellschaft für Int'l Project	Siaplan & Associates, Inc.
Boonton Main Street	Consult. mbH	Signature Commercial
Bovis Lend Lease, Inc.	ICAP Realty Advisors	Simmons Vedder
Brailsford & Dunlavey	ICF International	Simon Kwan & Associates, Ltd.
Brett Webber Architects	Icrave Design	Sinestezia
Brininstool-Lynch	Ilkun Architects and Designers	Singularity Studio
Broad Channel Builders	Imagery	Sino Land Company Limited
CAA - Urban Planning and	Imaginessence	Skadden, Arps, Slate, Meagher & Flom
Engineering Consultants	InDetail, Inc	LLP
Cabrera Group Architects	Indiana National Road Association	Skanska USA Building
California State Assemblyman Mark	Innerspace A.D.	Skidmore Owings & Merrill
Leno	Integra Development Partners	SL Green Realty Corp.
Calliope Properties	Integrated Conservation	Smardha & Associates
Calvo, Hampshire y Murat S.C.	Resources, Inc.	Smith Miller & Hawkinson Architects
CAMBA Housing Ventures	International Organization for	SMWM
Capital Funding Group	Migration	SO-AD
Cardinal Hardy & Associates	Iomedia	Society for Preservation of Long Island
Architects	IOMEDIA	Antiquities
Carlisle Development Group	Iowa State University	SoftLab
Carnegie Mellon University	Ivory Homes	Solidere
Catholic Univ. School of Arch &	J Plus Architects	Sony Corporation of America
Planning	Janus Partners	Spaulding & Slye
Cavallo Capital	Jason Tax Architect	Spaulding & Slye Colliers
CB Richard Ellis Investors, Japan	JEA Architects	SPEAC, Inc.
CBL and Associate Properties	Jerdy Parntership International	Spencer/Hoskins Associates
Cecile Pierce and Associates,	John Ronan Architect	Spiralstar Japan, Inc.
Architects	John Stewart Company	SSMMdesign Athens
Celeste P. Woodfill	Jones Lang LaSalle GmbH	Stamberg Aferiat Architecture
Central Roddy Inc.	Josef Gartner USA, Inc.	Standard Precast Walls
Chameleon Architecture &	JPI	Steinberg Architects
Urbanism	JTC Corporation	Stephen Tilly, Architect
Chattel Architecture, Planning &	jtmdsgn LLC	Steven Holl Architects
Preservation, Inc	K. Hsu Architects & Associates	Steven Learner Studio Architects, P.C.
Cherokee Northeast	Kaali-Nagy Company	Strata-Studio
Circum Pacific US	Kaehler Moore Architects	Studio
Citadel Commercial Inc.	Kaiser-Wilhelmring	Studio Sofield, Inc.
Citi Habitats	karen Bausman and Associtates	STV Incorporated
Citigroup Inc.	KBAS LCC	Sunshine Group
Citizens Housing & Planning, Inc.	KBieg Design	Superstructures
City Centre Properties, LLC	Keun Chang Industrial	TEN-Arquitectos
City of Elgin	Development	Terra Industries
City of Las Vegas	Kimco Realty Corporation	Texas Historical Commission
City of New York	Kimco Realty Corporation	The Athena Group LLC
Clairol Inc.	Kobe College - Japan	The Bluestone Organization
Classic Communities	Kohn Pedersen Fox Associates PC	The Boyer Company
Cleanroom Inc.	Koichi Tsutsui Architects	The Chinati Foundation
Cliff Young LTD	KPF	The Drivin Group
CNU	KPF	The JEM Group - Real Estate Consulting
CO Architects	Kratma Saini	& Development
Columbia University	Krueck+Sexton Architects	The Martin Group
Commercebank of Florida	Lante Corporation	The O'Neill Group
Common Ground Community	LaSalle Invest Management	The Related Group of Florida
Commonwealth Despatx	Lee and Timchula Architects	The Ritchie Organization
Community Corporation of Santa	LEO A DALY	The Setai Club
Monica	Leslie Gill Architect	The University of Suwon
Community Development Partners	Lexicon Development Corporation	The University of Tokyo
For The Americas, LLC	Liberty Hall Advisors, LLC	The Veritas Group
Conservation Solutions, Inc.	Lincoln Property Company	TIAA CREF
Cook Fox Architects	Lipthay Morande Browne	Time Equities, Inc.

Cornerstone Development Group	Arquitectos	Tishman Speyer
Corporate Properties of the Americas	Living Designs Group	TLCD Architecture
CPC Resources	Llonch and Vidalle Architecture	Tonkin Zulaikha Greer
Crescent Heights of America	loh Architects	Trammell Crow Company
Cultural Resource Consulting Group	LYN RICE ARCHITECTS	Travis Smith, Urban Designer
Curto Promotores-Eugercom	M. Nasr & Partners	Tri County Regional Planning Commission
Cushman & Wakefield, Inc.	Manchester Real Estate	Triangle Equitites
Cutsogeorge Tooman &Allen Architects	Mann Properties	Trickle Up
CW Capital	Marble Fairbanks Architects	Trump International Hotel & Tower
D Group Equities Management Services, Inc.	Mark Horton Architecture	Tulane University
Daniel Frankfurt, P.C.	Mesabius Real Estate	Two Twelve
Daniel Goldner Architects	MESH Architectures	TWO-N, INC.
David Hotson Architect	Mesirow Stein Real Estate	ty design
David Scott Parker Architects, LLC	Michael Baker Jr., Inc.	U.S. Department of Transportation
Davis Brody Bond, LLP	Michio Valian Architecture	University of Arkansas Community Design
DAZA Group of Companys	Middlebury College	University of North Carolina- Charlotte
Dbox	Mid-Peninsula Housing Coalition	University of Tokyo, Onishi Laboratory
Deborah Berke & Partners Architects LLP	Mike Latham's Art Corporation	University of Washington
DellaValle & Bernheimer Design	Mitsubishi Corp-UBS Realty Inc.	Urban International Group
Dennis Wedlick Architect	Monolith Productions	Urban Redevelopment Authority
Department of City Planning - New York	Moody's Investors Service	urbanAnthology
Destefano & Partners	MOREMAS	UTAP
DH Development Group	Morrison Express Corporation	Uwlab
Dharma Living Systems	MSB Associates	Valerio Dewalt Train
DHR Engineering, Inc.	Müller Reimann Gesellschaft von Architekten mbH	Verizon Business
di Domenico & Partners	N Architecture	Victor Mark Donaldson Architects
Diller Scofidio + Renfro	National Trust for Historic Preservation	Voorsanger Architects
DMJM Design	Neighborhood Housing Services of NYC, Inc.	Vulcan
Domus Properties - Greystone & Co.	Nelson \ Nygaard Consulting Associates	W & P Nautical
Donald Billinkoff Architects	Nelson, Pope & Voorhis, LLC	W Architecture
Doran Capital Partners	New York Academy of Medicine	Wank Adams Slavin Associates, LLP
Dormitory Authority of the State of New York	New York City Department of Planning	WASA Architects
Dunn Development Corp.	New York City Landmarks Preservation Commission	Wasatch Property Management, Inc.
Duvernay + Brooks LLC	New York Presbyterian Hospital	Watt Commercial Properties
DY Consultants	Nikken Sekkei Ltd.	Watts Engineers and Architects
Dyett and Bhatia	Normal Projects	Wedbush Morgan Securities
Earth Tech	Norsman Architects, Ltd.	Whole City Partners, LLC
Easton Combs Architects	North American Debt	Wiss, Janney, Elstner Associates, Inc
Echelon Resorts	nSTUDIO	WJE Engineers and Architects
Edaw, Inc.	NV Architects	Woodmont Properties
Edelman Sultan Knox Wood Architects	NY African Burial Ground Project	Workshop Architects, Inc.
Edmonds + Lee Architects	NYC DCP Transportation Division	Workshop/APD
EDS International	NYC Department of City Planning	World Monuments Fund
Ehrenkrantz Eckstut & Kuhn Architects	NYC Dept. of Housing Preservation and Development	WRS Architecture & Design PC
Eisenman Architects	NYC Economic Development Corporation	Yanfeng Visteon Automotive
Elias G. Barbalias - Special Buildings Contstructions	NYC HPD	YL Real Estate Developers
EM Architect & Associates	NYC Landmarks Preservation Commission	Zaha Hadid, Architects
Emma Willard School	Obayashi Corporation	Zephyr Management, LP
ENSR International	OFB Projektentwicklung Gmbh	ZHA
EPR Architects Ltd.	Office for Conservation & Community Outreach	
ERA Planning Architecture	Office for Metropolitan Architecture	
Consulting Co. Ltd.	Oppenheim Architecture Design	
Estudio Entresitio	Parra Design Group, Ltd.	
	Parson Brinckerhoff Quade &	

Eurohypo AG EVI/Ernst Valery Investments Ewha Women's University F.J. Sciame Construction Co. Falcon Property Group Familia Design Far East National Bank Federal Realty Investment Trust	Douglas	

APPENDIX 20: List of Contributors to the APR

Shahdeh Ammadi, Director, Alumni Relations and Annual Fund
Prof. Amale Andraos, Core Studio II Coordinator
Prof. Phillip Anzalone, Director of Building Science and Technology Sequence
Prof. Michael Bell, Director of Core Studios
Victoria Benitez, Senior Public Affairs Officer
Prof. David Benjamin, Accreditation Coordinator
Prof. Craig Buckley, Director of Publications
Greg Bugel, Exhibitions Coordinator
Dr. Carol Anne Fabian, Avery Librarian
Prof. Kenneth Frampton, Director of History/ Theory Sequence
Prof. Laurie Hawkinson, Director of Advanced Studios
Dr. David Hinkle, Senior Associate Dean
Anna Kenoff, Coordinator of Buell Center for the Study of American Architecture
Prof. Laura Kurgan, Director of Visual Studies sequence
Malwina Łyś-Dobradin, Director of Studio-X Programming
Prof. Scott Marble, Director of Fabrication Research
John Ramahlo, Executive Director of Information Technology
Janet Reyes, Associate Dean of Finance
Prof. Hilary Sample, Core Studio III Coordinator
Prof. Paul Segal, Director of Professional Practice Sequence, IDP Coordinator
Prof. Galia Solomonoff, Core Studio I Coordinator
Danielle Smoller, Assistant Dean of Admissions and Student Affairs
Dan Tae Younglee, Student, Program Council
Mark Taylor, Director of Operations
Troy Therrien, Director of Cloud Communications Group
Prof. Mark Wasiuta, Director of Exhibitions
Dean Mark Wigley
George Valdes, Accreditation Coordinator

APPENDIX 21: *Abstract* (Publication of student work)

www.arch.columbia.edu/publications/abstract

APPENDIX 22: *Professional Practice* (textbook by Paul Segal)

A physical copy of this book will be available in the Team Room.