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Sam Fox School of Design & Visual Arts
Washington University in St. Louis

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PART ONE (I): INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT

I.1 IDENTITY and SELF-ASSESSMENT

I.1.1 HISTORY AND MISSION

Washington University in St. Louis

The origins of Washington University date back to 1853, when William Greenleaf Eliot, a Unitarian Minister, with a group of prominent St. Louis citizens, developed the vision of a great institution of higher education west of the Mississippi. In his honor, it was named Eliot Seminary, although it never had a religious affiliation. The name of the institution was changed four years later at the insistence of Mr. Eliot to become the first institution of higher education to bear the name Washington University. Today, Washington University in St. Louis is an independent, nondenominational university of international stature.

Washington University in St. Louis was located for its first half-century at 17th Street and Washington Avenue in downtown St. Louis. Under the dynamic leadership of Robert S. Brookings, a St. Louis merchant, the University relocated in 1905 to its present Danforth Campus straddling the St. Louis City line, on what was then undeveloped land. University officials, on the advice of Olmsted and Olmsted of New York, seized the opportunity to coordinate the development of a new campus with plans for the 1904 World's Fair and held an international architectural competition for the new campus plan. Cope and Stewardson, a Philadelphia architectural firm experienced in campus architectural design, won the competition with a design combining subtle landscape architecture with Collegiate Gothic classroom buildings and courtyards. The main Quadrangle buildings (now on the Historic Register) were erected in time to be leased to the Fair administration; the Fair itself was located in Forest Park immediately adjacent to the campus. Following the Fair in 1905, the University took possession of the buildings, using the rental fees to continue building and developing the extraordinarily successful architectural master plan.

In 2003–04, Washington University in St. Louis celebrated its sesquicentennial. The current student body is not large (about 6,500 undergraduates and 6,500 graduate and professional students), yet the University's resources and faculty are characteristic of a much larger institution. The diverse student body draws enrollment from all U.S. states and more than 80 nations. *U.S. News and World Report* ranks the University thirteenth among comparable institutions.

In July 2006, the Sam Fox School of Design & Visual Arts was established, incorporating the Graduate School of Architecture & Urban Design, the College of Architecture (undergraduate programs), the Graduate School of Art, the College of Art, and the Mildred Lane Kemper Art Museum. In addition to the Sam Fox School, the Washington University Danforth campus includes several other major teaching units: the College of Arts & Sciences (undergraduate); the Graduate School of Arts & Sciences (graduate); the School of Engineering & Applied Science and the Sever Institute of Continuing Studies (undergraduate and graduate); the George Warren Brown School of Social Work (graduate); the School of Law (graduate); and the Olin Business School (undergraduate and graduate). The School of Medicine, located on the eastern end of Forest Park adjacent to major hospitals, offers additional graduate and professional degrees.

The emergence of Washington University in St. Louis as a major national university over the past three decades has been the result of carefully designed and implemented plans initiated by former Chancellor William Danforth and accelerated in the last fifteen years by current Chancellor Mark S. Wrighton. During these decades, certain institutional characteristics have remained constant. Chief among them has been Washington University's commitment to a demonstrably high quality in the nature of its faculty

(eighteen Nobel laureates have been associated with the University), its educational programs and research, and its student body. The University has also continued a commitment to being a comprehensive university, with balanced attention to undergraduate, graduate, and professional study and research. Particular attention has been paid to the interrelationships among its various schools, the maintenance of its moderate size, the development of international programs, the promotion of diversity, and a commitment to environmental and energy research. Under Chancellor Wrighton's leadership, Washington University has ascended into the first rank of world research universities.

The University's mission statement reflects its commitment to excellence and diversity across its many programs and among its faculty and students. Approved by the Faculty Senate Council on October 27, 1994, and the Board of Trustees on December 2, 1994, the statement is available in University publications and on the University website:

"The mission of Washington University is the promotion of learning—by both students and faculty. Teaching—the transmission of knowledge—is central to our mission, as is research—the creation of new knowledge. Faculty composed of scholars, scientists, artists, and members of the learned professions serve society by teaching; by adding to the store of human art, understanding, and wisdom; and by providing direct services, such as health care."

"Our goals are:

- *to foster excellence in our teaching, research, scholarship, and service;*
- *to prepare students with the attitudes, skills, and habits of lifelong learning and with leadership skills, enabling them to be useful members of a global society; and*
- *to be an exemplary institution in our home community, St. Louis, as well as in the nation and the world."*

"To this end, we intend:

- *to judge ourselves by the most demanding standards;*
- *to attract people of great ability from all types of backgrounds;*
- *to encourage faculty and students to be bold, independent, and creative thinkers; and*
- *to provide the infrastructure to support teaching, research, scholarship, and service for the present and for future generations."*

Recent University initiatives of note include the development of the International Center for Advanced Renewable Energy and Sustainability (I-CARES), created in June 2007 to foster research on energy, environment, and sustainability that cannot be done by single investigators or by single disciplines alone. I-CARES nurtures collaborations within Washington University and with regional and international partners in order to contribute to rapid progress in addressing the world's energy and environmental needs. The Graduate School of Architecture & Urban Design is one of the academic partners in this program.

The McDonnell International Scholars Academy, another notable initiative, draws on a network of esteemed partner universities around the world to bring exceptionally talented graduate and professional students to Washington University. The program affirms our country's interest in attracting talented international students for advanced study and provides a means for the University to learn more about the global community. The McDonnell Academy's mission is to provide its scholars with an extraordinary educational experience, and in doing so, to strengthen its international network of research universities, to develop a cohort of future leaders in a global university system, and to

promote global awareness and social responsibility. The Graduate School of Architecture & Urban Design is one of the academic partners in this program.

The Sam Fox School of Design & Visual Arts

The Sam Fox School of Design & Visual Arts builds on the rich histories of its three central units:

- The School of Art was founded in 1879 as the first professional, university-affiliated art school in the United States. The School is now organized as an undergraduate College and a Graduate School of Art.
- The School of Architecture was established in 1910, and has the distinction of being one of the eight founding members of the Association of Collegiate Schools of Architecture. The School is now organized as an undergraduate College and a Graduate School of Architecture & Urban Design.
- The Mildred Lane Kemper Art Museum (formerly the Washington University Gallery of Art) was founded in 1881 as the first art museum west of the Mississippi River.

The initial vision for the Sam Fox School took shape as the Visual Arts & Design Center (1997), subsequently named the Sam Fox Arts Center (2002), which was founded as a hub for interdisciplinary art and design programs. The Sam Fox Arts Center's goals were to provide enhanced opportunities for interdisciplinary study; to encourage the application of emerging information technologies to scholarly and creative work; and to foster the integration of visual literacy as a component in today's liberal arts education for all students.

The vision grew to encompass a more expansive collaborative academic endeavor in architecture, design, and art through the launch of a new school at Washington University. In January 2005, Chancellor Mark Wrighton announced the creation of the Sam Fox School of Design & Visual Arts, uniting the academic units of Art and Architecture with the University Museum under the leadership of a new dean, Carmon Colangelo. The School was formally inaugurated in July 2006.

The improvement, expansion, and construction of new facilities for this collaborative unit have been significant accomplishments. Renovations to Bixby Hall (constructed 1927) and Givens Hall (constructed 1932), home to Art and Architecture respectively, were completed in 2001, and the Mildred Lane Kemper Art Museum was dedicated in 2006. This modernist building, designed by Pritzker Prize-winning architect and former faculty member architect Fumihiko Maki, provides a contemporary home to the University's fine collection of art, as well as the Kenneth and Nancy Kranzberg Art & Architecture Library and the Whitaker Learning Lab, a new media center. Another Maki building dedicated in 2006, Earl E. and Myrtle E. Walker Hall, provides expanded studio space for the College of Art. Steinberg Hall, home to both Art and Architecture programs, completes the Sam Fox School campus. This building, Maki's first commission, was built in 1960 and renovated in 2007.

The mission of the Sam Fox School of Design and Visual Arts is to be a unique collaboration in architecture, art, and design education, dedicated to excellence in learning, creative activity, research, and exhibition.

The School's vision is articulated in the following statement and can also be found online:

"Our unique tripartite structure allows us to build on the strengths of each unit—Art, Architecture, and Museum—and to draw on the resources of Washington University to chart innovative directions, create new knowledge, advance the theory and practice of our fields, and address the social and environmental challenges of our time.

Building on these founding principles, the School engaged in a comprehensive strategic planning process from 2006 to 2008, including faculty, administrators, and volunteer leaders, that resulted in the 10-year *Design for Excellence* plan. The plan outlines five key priorities for the School:

- Distinguish the Sam Fox School by developing an innovative undergraduate curriculum
- Build top-tier graduate programs that promote interdisciplinary practices
- Develop a comprehensive agenda for supporting creative research and activity
- Develop and steward the art holdings of the museum and the University
- Prepare our students to be productive, competitive, and successful in a world of global opportunities

To achieve the goals laid out in the *Design for Excellence*, the School anticipates resource requirements of approximately $110 million by 2020. Investment will be required for scholarships ($39 million), facilities ($30 million); faculty ($26 million), and academic programs ($25 million). The School is currently engaged in the first phase of this fundraising, focusing on scholarships, which is a top priority for the Sam Fox School. Approximately half of our undergraduates and nearly all of our graduate students in Architecture receive need-based scholarship support, and student need continues to grow. As part of a University-wide Scholarship Initiative launched in 2009, the Sam Fox School is committed to raising $10 million in scholarship support by 2014: $5 million for Architecture students and $5 million for Art students. To date, the School has raised $3 million or 30% of these funds. These scholarship resources will be critical, ensuring that Architecture students and families can continue to access world-class educational opportunities at Washington University.

Architecture at Washington University in St. Louis

Architecture was mentioned in the University catalog as early as 1871, but the Department of Architecture was formally established as part of the School of Engineering and Architecture in 1902. The School of Architecture was established as an independent division of the University in 1910, and in 1912 the School was one of eight founding members of the Association of Collegiate Schools of Architecture (ACSA).

Past Deans of Architecture include Joseph Murphy, 1949–1952; Buford Pickens, 1953–1956; Joseph R. Passonneau, 1956–1967; George Anselevicius, 1968–1973; and Constantine Michaelides, 1973–1993 (now Dean Emeritus). In 1993, Chicago architect and professional leader Cynthia Weese, FAIA, herself a graduate of the School of Architecture, succeeded Dean Emeritus Michaelides. Under Dean Weese's leadership, Architecture progressed energetically in graduate curriculum, international program development, and facilities and resource planning. Jerome J. Sincoff, FAIA, past president of Hellmuth, Obata and Kassabaum (HOK), succeeded Cynthia Weese as dean in 2005. In November 2006, architect and educator Bruce Lindsey, AIA, began his tenure as Dean of Architecture. Dean Lindsey has led the Master of Landscape Architecture initiative, strengthened community design programs, and enhanced environmental education at all levels as the Graduate School has continued to grow. Well-recognized practitioner and educator Kathryn Dean joined the faculty in 2008 as Director of Graduate Programs for the Graduate School of Architecture & Urban Design.

In 1986, Architecture received its first endowed chair, the Ruth and Norman Moore Distinguished Professorship in Architecture. The distinguished architectural historian Udo Kultermann was the first holder of this chair until his retirement in 1994. In 1996, the South African architect Jo Noero succeeded Professor Kultermann, until his departure in December 2001. In November 2007, architect and educator Robert McCarter assumed this prestigious chaired professorship. The Moores also honored Architecture in 1991 by

establishing the Ruth and Norman Moore Visiting Professorship, held by a succession of renowned practitioners and critics, including recent visitors Brian Mackay-Lyons, Julie Snow, and Marlon Blackwell, as well as Pritzker Prize-winner Glenn Murcutt. The Raymond E. Maritz Professorship was established in 1996 in honor of a prominent local architect. Adrian Luchini holds the Raymond E. Maritz full-time faculty chair, while Juhani Pallasmaa, the distinguished Finnish architect and educator, served as the Maritz Visiting Professor through 2004. Paul J. Donnelly was named the first Rebecca and John Voyles Professor in 1999. In September 2006, Carmon Colangelo, Dean of the Sam Fox School of Design & Visual Arts, became the E. Desmond Lee Professor for Community Collaboration in the Arts. In 2007, Bruce Lindsey, Dean of Architecture, was named the E. Desmond Lee Professor for Community Collaboration in the Sam Fox School.

Architecture's faculty has included four Pritzker Prize winners — Gottfried Böhm, Hans Hollein, Fumihiko Maki, and Glenn Murcutt — along with other internationally and nationally known architects and educators. Among the achievements of current faculty, Paul J. Donnelly was recognized as ACSA Distinguished Professor in 2007; Peter MacKeith received an ACSA National Award for Creative Achievement in Design Education in 2008; Bruce Lindsey was named one of the Most Admired Educators of 2009 by *DesignIntelligence*; Igor Marjanovic received a National Education Honor Award from the AIA in 2009; and Robert McCarter was selected as one of the "Ten Best Educators" in American schools of architecture in the education issue of *Architect* magazine in 2009.

The Graduate School of Architecture & Urban Design is ranked ninth by *DesignIntelligence* (2010). Architecture adheres to high admissions standards in both undergraduate and graduate programs of study and maintains a student body that is both academically rigorous and demographically diverse. The student body, composed of approximately 200 undergraduates in the Bachelor of Design and Bachelor of Science curricula and approximately 300 graduate students across the Master of Architecture, Master of Landscape Architecture, and Master of Urban Design programs, is large enough to support an enriching variety of studio and course opportunities, but small enough to retain a strong sense of community and a high quality of teaching and learning.

The mission of the Graduate School of Architecture & Urban Design is to educate leaders in architecture, landscape architecture, and urban design who advance design as a creative and innovative practice.

The faculty adopted this mission statement on May 19, 2011. It replaces the previous mission statement adopted by the Board of Trustees in 1995. This statement represents the faculty's belief in the transformative power of design and its importance for our students' professional futures and the future of our shared physical and cultural environment. The mission underlies the structure of the professional architecture curriculum and supports the fundamental interdisciplinary relationships between the Landscape Architecture program, the Urban Design program, and the undergraduate program and its liberal arts foundation.

Activities and Initiatives

The Graduate School of Architecture & Urban Design contributes to the University mission through its academic offerings, extensive public programming, service to the University and community, and professional engagement. The Graduate School is one of the University's five professional programs that include Engineering, Law, Business, Medicine, and Social Work. Through a free trade agreement, graduate students from across the University can take courses in the Graduate School of Architecture & Urban Design. Dual degrees in Social Work, Business, and Construction Management

connects architectural students with students across the University. In the past three years, Architecture faculty-led research projects have included partnerships with Art, Engineering, Social Work, and Medicine, as well as the Gephardt Institute for Public Service, The Skandalaris Center for Entrepreneurial Studies, I-CARES, and the Institute for Public Health.

Faculty routinely serve on University committees and steering committees including the Institute for Public Health Faculty Steering Committee, Gephardt Institute for Public Service Steering Committee, I-CARES Steering Committee, the McDonnell Academy Steering Committee, Tyson Research Center Steering Committee, the University as Anchor Institution Task Force, Fulbright Fellowship Committee, Honorary Degrees Committee, Chancellor's Committee on Diversity, Bob and Gerry Virgil Ethic of Service Award Selection Committee, Global Certificate Committee, Chancellor's Committee on Energy and Environment, the Committee for Emergency Preparedness, the Undergraduate Council, and Faculty Senate, to name a few.

The Mildred Lane Kemper Art Museum, the oldest university museum west of the Mississippi River, contributes directly to the University's mission to add to the "store of art." Two Museum exhibitions curated by Architecture faculty have brought important architectural work and ideas to the University and regional communities. *Eero Saarinen: Shaping the Future* (January 30 - April 27, 2009) was locally curated from the traveling exhibition by Associate Professor Peter MacKeith and remains the highest attended show in the Museum's history. A parallel exhibition and day-long symposium, *On The Riverfront: St. Louis and the Gateway Arch*, surveyed the urban history of the region and highlighted the design and construction of the Arch. *Metabolic City: Drawing and Urbanism* (September 18, 2009 - January 4, 2010), curated by Associate Professor and Chair of Architecture Heather Woofter, highlighted the work of the Metabolist architects. A public lecture by Dennis Crompton, member of Archigram and visiting faculty, contributed to the show's impact across the University and is just one example of the Graduate School's extensive public programming, which includes exhibitions, lectures, workshops, and community-based projects and courses (see also I.1.3 Response to the Five Perspectives, Architecture Education and the Public Good).

The Architecture program contributes significantly to the physical environment of the University, particularly in the context of capital projects and planning. Dean Lindsey serves as an ex officio member and consultant to the Buildings and Grounds Committee of the Board of Trustees. This committee reviews and approves all University building and planning projects. Faculty and deans serve on selection committees for project architects and provide input for invitations of qualifications for design and planning consultants. Dean Lindsey and Dean Colangelo have been advisory to Executive Vice Chancellor Henry Webber for capital projects and the hiring of Jamie Kolker, Assistant Vice Chancellor for Campus Planning and Director of Capital Projects. Dean Colangelo has led the Art on Campus initiative, which was approved by the Board of Trustees last year. This program requires all capital projects over $500,000 to allocate one percent (1%) of the project budget for public art. The acquired artworks become part of the Museum's collection. In addition, faculty routinely use campus spaces as sites for design studios, which contributes to the dialogue regarding campus planning and development.

Architecture faculty contribute to the University's mission of "providing direct services" through their professional work. A number of faculty maintain active, award-winning design and art practices that contribute to the regional community through built projects, design and planning studies, exhibitions, public art installations, and professional consultation. With over 40 adjunct faculty, the School benefits directly from a very active local design community and extensive engagement with the regional design and construction industries. The School also acts as a resource to the community and takes seriously its responsibility to participate and contribute beyond campus.

The Graduate School of Architecture & Urban Design benefits directly from the institutional setting of Washington University. The University's commitment to architecture, art, and design education and research is exemplified by the Chancellor's support and role in the development of the Sam Fox School and its new facilities. The scale of the University is large enough to provide the support and enrichment that comes from a tier-one research institution, while remaining small enough to nurture individual faculty and student relationships that contribute to an active and productive learning environment. The School shares in the pride of the University as a place dedicated to student and faculty success.

In the last five years, the University has increased its emphasis on energy and the environment, including the establishment of the International Center for Advanced Renewable Energy and Sustainability (I-CARES). As part of this initiative, seven I-CARES endowed professors of sustainability will join the faculty in programs across the University. Professor of Practice Christof Jantzen of the Graduate School of Architecture & Urban Design is the first of these and is helping to lead the Graduate School's research initiatives. Architecture faculty have been successful in receiving nearly $100,000 in I-CARES seed grant funding for research projects. These projects have included innovative approaches to research and sustainability such as investigation and analysis of zero energy/zero carbon building design, investigation into international sustainable research and innovation programs, and the *Metabolic Citiy* exhibition and its focus on early ideas of urban sustainability as reflected in the work of the Metabolist architects.

The Graduate School of Architecture & Urban Design benefits from an institutional context that is characterized by very high standards of scholarship, research, practice, teaching, and service. Faculty share these values, as demonstrated through co-taught coursework, colloquia, University committee work, involvement in the University's ongoing efforts to evolve its mission and goals, and, importantly, faculty searches, in which every effort is made to recruit, hire, and retain the best faculty in the field. University values are also reflected in the Graduate School's high standards for its students. Students and faculty benefit from being members of a community where excellence is pervasive, supported, and celebrated.

Holistic Development

The practice of architecture has evolved from a position of discrete knowledge, localized influence, and professional responsibility to one of multiple knowledge bases, global implications, and multi-disciplinary interactions. This new reality of practice, fueled by technological change and the imperative for environmental sustainability, is reshaping architecture education as the traditional modes and themes of design pedagogy are challenged.

Sustainability constitutes a paradigm shift in environmental design and social justice. Given the complexity and scope of the issues and their global importance, architecture students and faculty must participate as leaders in the dialogue and instigate investigation and research throughout the discipline's many facets. The Graduate School's response emphasizes environmental ethics, interdisciplinary and global perspectives, innovation, and a redefinition of the idea of beauty. The Graduate School emphasizes architecture's critical ability to connect us to our environment and to each other. The Graduate School of Architecture & Urban Design is committed to leadership in sustainable design, recognizing its paramount importance to the field. The Graduate School is building its human capital and knowledge base to achieve both teaching and research excellence in this area.

The Graduate School has long held a reputation for educating students who are effective in practice directly out of school. This is reflected in a curriculum that uses design as a synthetic and creative activity, allowing technology, history, theory, context, and culture to be generative. Graduating students' effectiveness in practice is a result, in large part, of the studio sequence. At the same time, the Graduate School seeks to support the development of its students' individual identities as designers and future leaders. This is reflected in a curriculum that features tremendous flexibility: a required core is followed by an individually customized sequence of option studios and electives, culminating in a capstone final degree project characterized by thoughtful development, innovation, and relevance. International programs provide opportunities for a necessary global perspective. These programs operate as a part of the school's professional practice coursework, exposing students to architects and their practices around the world. They also operate as part of the Architecture students' urban design education through introduction to and study of some of the great cities in the world. All international programs have a required urban issues course.

The heart of the graduate curriculum is the flexible sequence of option studios and elective offerings that allows students to customize their architectural education. The variety of faculty, both in residence and visiting, and the diversity of theoretical approaches, sites, and programs encourage students to explore and test their architectural identities. Visiting faculty include world-renowned architects (Glenn Murcutt, Wiel Arets), emerging voices (Marcelo Spina, Mitchell Joachim), nationally celebrated architects (Lawrence Scarpa, Adam Yarinsky), and talented alumni (Andrew Bernheimer and Jared Della Valle). Elective courses range widely in subject and method as well as location. Graduate students may take elective coursework across the University for increased breadth of knowledge.

The final degree studio requires students to complete a project of their own devising that advances architectural discourse through a specific and developed design proposal. Project sites are encouraged to be in the St. Louis region so that students have first-hand access to direct experience, information, and expertise. It also allows the collective output of the students to contribute to the future of the region's development. This is a demanding conclusion to their time as students and is considered the beginning of their professional careers as architects.

The Graduate School benefits from its multiple degree programs, providing Architecture students with the opportunity to take courses and option studios in Landscape Architecture or Urban Design. Likewise, Landscape Architecture students are able to take Architecture or Urban Design studios and required or elective courses in Architecture. The majority of Urban Design students are part of the dual degree program with Architecture. Moving through the bulk of the Architecture curriculum before entering the Urban Design program, these students bring strong design experience to their studies. Dual degrees in Architecture and Landscape Architecture are being developed and will certainly contribute to the important interdisciplinary dialogue within the Graduate School. An important dimension to this work is a strong belief among faculty in the importance of discipline-specific knowledge to interdisciplinary work. In other words, we need strength within disciplines to be effective and innovative when working across disciplines. Future collaborations with the Graduate School of Art are also in development.

The Graduate School actively promotes internships and professional experiences for students as part of its holistic approach to education. The development of the new Design Internship Network (DIN), a partnership of firms and organizations committed to providing internships to Washington University architecture students, is aimed at increasing these professional opportunities. As mentioned earlier, students benefit tremendously from the large number of practicing professionals who teach courses and

studios as adjunct professors. This brings the profession to the Graduate School through numerous channels. In return, this arrangement has a very positive impact on the profession by brining the energy and creativity of the students to the greater design community. The Graduate School also offers a unique sequence of three professional practice courses (one required) that allows students to gain some depth in professional ethics, project delivery, and project management.

As the Graduate School promotes a multi-dimensional educational experience, open forums and continuing dialogue create a sense of common purpose among faculty, students, and alumni. The School actively pursues a welcoming and vibrant environment through a socially and culturally diverse faculty and student body. And by exploring innovative teaching methods and advanced forms of research, the faculty is able to expand the knowledge base that enforces architectural work across multiple realms within the field.

I.1.2 LEARNING CULTURE AND SOCIAL EQUITY

Learning Culture

The 2010-2011 Bulletin for the Graduate School of Architecture & Urban Design titles its section on the School's people and culture "An Intimate Community," and continues:

"The Sam Fox and Graduate School community is a vibrant and personal place engaged in the diverse, humanistic study of architecture, design, and the visual arts. Owing to our intentionally small size, the sense of congeniality and mutual respect among students, faculty, and staff is ever-present, throughout offices and seminar rooms, in the design studios and reviews, and in the hallways. There is an equally intentional transparency to Architecture's administration, in which students are involved in all aspects of the curriculum, admissions and future visions. A sense of collective engagement in architectural and educational ideals animates Givens Hall."

The Studio Culture Policy of the Graduate School furthers these ideals, in its opening words:

"The Graduate School of Architecture and Urban Design at Washington University in St. Louis is a design institution; as such, the design studio is fundamental to the curriculum. The design studio offers an education marked by integration and cooperation among myriad disciplines, international cultures, and the infinite trajectories of contemporary design. The design studio provides and encourages many avenues for creative thought, ensuring that the studio is a place of continued innovation, experimentation, and professional preparation. To support this integrated curricular nature in the design studio, the students, faculty, and staff of the Graduate School of Architecture & Urban Design will engender a studio culture marked by exploration, production, and critique."

The Studio Culture Policy in its entirety is available and accessible to all students, faculty, and staff here; paper copies are now distributed by the Graduate Architecture Council at All-School Meetings, as noted below.

The Studio Culture Policy addresses issues of health and wellness, time management, critical discourse and communication, integrity, diversity, leadership, and rights and responsibilities. A Studio Culture Policy has been in place since 2005, prior to the last accreditation year; the Policy now implemented is the product of review and revision by the student Graduate Architecture Council beginning in 2007 and continuing until spring 2010. The Dean and the faculty have reviewed it over the last year of faculty meetings. The principles and expectations of the Studio Culture Policy are introduced to newly enrolling students during the summer orientation session and reviewed for all returning students by the Dean and the faculty at the All-School Meetings at the onset of each

semester. The Graduate Architecture Council monitors and assesses the efficacy of the Studio Culture Policy and reports regularly to the Dean and faculty at monthly faculty meetings.

Additionally, as noted in the "Academic Integrity" section below, the Graduate School's policies on academic integrity and expectations on conduct are now linked to the professional standards articulated in the AIA's *Code of Ethics and Professional Conduct*; these are available to students on the School website, referenced in the Graduate School's academic integrity policy, and reviewed as part of the required professional practice coursework.

Social Equity

Washington University is committed to having a positive learning and working environment for its students, faculty, and staff. University policy prohibits discrimination based on race, color, age, religion, gender, sexual orientation, gender identity or expression, national origin, veteran status, disability, or genetic information. Statements confirming these fundamental commitments are available to the University community:

University statement on Equal Employment and Affirmative Action.
University non-discrimination statement.

The Graduate School of Architecture & Urban Design upholds and maintains these fundamental commitments. These University policies are available directly to Graduate School faculty, staff, and students on the Faculty/Staff Resources and Student Resources links on the School's website.

Harassment or discrimination based on any of the above classifications violates University policy and will not be tolerated. In some circumstances, such harassment may also violate federal, state, or local law.

In 1996, the University adopted a new Sexual Harassment Policy. Since that time, allegations of discriminatory harassment on bases other than sex have been handled in a similar manner as dictated by the University Policy on Discriminatory Harassment. These policies apply to all members of the Washington University community. They allocate responsibility for helping to ensure that University policy is fairly applied, explain the processes by which complaints of harassment may be brought forward, and provide sanctions for harassment, which may range from reprimands to termination or dismissal, depending on the severity of the offense. School of Medicine students and employees may, alternatively, rely on the School's Abusive Conduct Policy.

In an academic community, the free and open exchange of ideas and viewpoints reflected in the concept of academic freedom may sometimes prove distasteful, disturbing or offensive to some. Indeed, the examination and challenging of assumptions, beliefs or viewpoints that is intrinsic to education may sometimes be disturbing to the individual. Neither the Policy on Sexual Harassment nor the Policy on Discriminatory Harassment is intended to compromise Washington University's traditional commitment to academic freedom or to education that encourages students to challenge their own views of themselves and the world.

The harassment policies (which include procedures for grievances) are published in many places, including *Bearings*, the *Record*, and the Faculty Information booklet, see for instance:

Policy on harassment and discrimination: from Bearings and from the University website.
Policy on sexual harassment.

These University policies are available directly to students, faculty, and staff of the Sam Fox School through the Faculty/Staff Resources pages and the Student Resources pages on the School website.

A University Judicial Code (UJC) exists, administered by the University Judicial Administrator; this code of conduct applies to all students, faculty, and staff. The Associate Deans of the Sam Fox School meet monthly with the UJC Administrator and their colleagues, in continuous review of these policies and specific circumstances. The UJC is available directly to Sam Fox students here. Parallel to the Judicial Code, there is a University Code of Conduct regarding research practices and conduct of business, particularly outside the University, from the Provost and from University Compliance. The Director of the Sam Fox School Research Office oversees and monitors research efforts in accordance with these policies.

The University provides strong support and resources for students with mobility and learning disabilities through Cornerstone: The Center for Advanced Learning. These resources are outlined on the University website and on the School website. The Associate Deans of the Sam Fox School work with the Dean, director, chair, and faculty of the Graduate School to provide specific support and resources for students with disabilities. The Sam Fox School facilities meet current ADA accessibility standards.

Academic Integrity

Statements, policies, and procedures regarding the maintenance of academic integrity support academic freedom at Washington University and in the Sam Fox School. A useful overview of the teaching and learning responsibilities expected of faculty and students is found here; these statements underscore the mutual commitment to academic integrity by both faculty and students. Beyond this, the statements, policies, and procedures outlined for faculty upon arrival, and re-stated in the Faculty Handbook, particularly Section II, regarding Academic Freedom and Responsibilities, guide all University faculty.

All University undergraduate students are governed by the same academic integrity policy and procedures.

Academic integrity policies for graduate students will now be statements specific to each graduate school; since 2008, the Office of the Provost, the University General Counsel, and the University Judicial Administrator have worked closely with the respective graduate schools to develop, implement, and guide the establishment of these specific policies. The Graduate School of Architecture & Urban Design began this development process in 2009, under the leadership of the Graduate Architecture Council and the guidance of the Associate Dean of the Sam Fox School. The Graduate School's policies on academic integrity and expectations for conduct will also now be linked to the professional standards articulated in the AIA's Code of Ethics and Professional Conduct; these standards are available to students on the School website, referenced in the Graduate School's academic integrity policy, and reviewed as part of the required professional practice coursework. The new Graduate School-specific academic integrity policy will be presented to the faculty in September 2011 and confirmed in October 2011.

In the interim, by agreement with the Office of the Provost, the University General Counsel, and the University Judicial Administrator, statements, policies, and procedures utilized by the Graduate School of Arts & Sciences govern the Graduate School of Architecture & Urban Design. These policies are stated on the School's website.

Course syllabi issued by instructors are required to make reference to academic integrity expectations and policies; resources to assist students in understanding correct research and citation practices, among other support systems, are available to students at the University Writing Center. Enrolling graduate students are provided with an orientation session on academic integrity and support resources as part of the Graduate School's summer orientation. The Associate Dean of the Sam Fox School serves as the ombudsman and administrator for issues, concerns, and implementations of policies and procedures on academic integrity. He consults regularly with the Dean, director, chairs, and faculty, as well as with the Graduate Architecture Council and the University Judicial Administrator.

Diversity Plan

The 2005-06 APR reviewed at length the Graduate School's approaches, policies, and goals regarding diversity in faculty appointments, student admissions, and enrollment. Since that year, the University has established and appointed a Provost, whose Office subsequently has undertaken a review, assessment, and development of a University Diversity Plan. The Provost has also appointed a Vice-Provost for Campus Diversity to oversee this effort and to work with the Schools on school-specific diversity initiatives. Descriptions of these efforts can be found online:

Provost's statement on diversity.
Provost / University Resources in support of diversity.

At the request of the Office of the Provost, the Sam Fox School has undertaken an internal "Diversity Practice Survey," assessing faculty, staff, and student perspectives, policies, and programs in support of diversity; a summary of this internal survey is available from the Office of the Sam Fox School Dean. This survey is the first step in developing a more comprehensive plan for the School; this is a priority for the fall 2011. However, in the meantime, significant and productive diversity initiatives have been identified and accomplished for the School, including the following: the development and implementation of best practices to create both diverse applicant pools and search committees for senior leadership, faculty, and staff searches; to actively locate and recruit faculty, staff, and students from underrepresented groups; and to implement strategies to retain and support faculty, staff, and students from underrepresented groups.

The Graduate School has had success in recruiting and appointing women to its senior leadership and faculty as well as in recruiting and enrolling women as students across its programs; it has been less successful in recruiting and maintaining minority faculty and students. This is a clear priority being addressed in the coming diversity plan. Importantly, the Sam Fox faculty recently adopted (as of October 2010) new Tenure and Promotion policies specifically addressing diversity issues in search and appointment procedures.

I.1.3 RESPONSE TO THE FIVE PERSPECTIVES

A. Architectural Education and the Academic Community

The programs at the Graduate School of Architecture & Urban Design offer vision and demand commitment throughout a variety of degree programs, degree options, and terms of study. A central purpose for all the graduate programs is the establishment of the architect's identity. The aim of any curriculum sequence is to educate expressive, skillful designers, prepared to act as thoughtful, effective members of the profession and practice of architecture, as well as engaged citizens of their communities and the larger global context. The architectural education overall is therefore premised on the understanding of the discipline as a deeply humanistic endeavor; this reflects and resounds the central strengths and resources of the University.

The Graduate School of Architecture & Urban Design is engaged in architecture in all its manifestations of discourse and practice, from sustainable design principles, building technologies, and professional standards to drawing, painting, and sculpture; from digital media to full-scale fabrication; from architectural history to critical theory. Along with the focus on St. Louis and the North American continent in the curriculum, international semesters expand the physical reach of the graduate programs, connecting them to diverse educational settings in Europe, South America, and Asia. The Graduate School's programs are thus interconnected and integrated sequences of design studios and parallel course work, moving between values of ecology, technology, history, and craft, emphasizing both theory and practice, and in consideration of site, material, assembly, purpose, and social responsibility. Students have extensive opportunities for elective coursework as well as entrance into dual degree programs in Business, Social Work, Construction Management, Landscape Architecture, and Urban Design.

Finnish architect Alvar Aalto held that "architectural design operates with innumerable elements that internally stand in opposition to one another. They are social, human, economic, and technical problems…" The reconciliation of these oppositions in response to human and environmental purposes is the task of the architect. The Graduate School's search for this reconciliation through education is no less a design challenge. The continual construction process of careful questioning, application of knowledge, and proposal of possible resolutions—with modesty, proportion, and conscience—emerges in the daily education of architects at Washington University.

The Graduate School community of scholars, practitioners, and students makes active, unique contributions to the larger Sam Fox School, to the University community, and to national and international audiences and constituencies; a partial listing of such contributions is provided below. The Graduate School vigorously supports its faculty and students in pursuing opportunities for developing new knowledge, making use of the Sam Fox School Research Office resources, and as also outlined below.

Contributions to the Institution

Paul J. Donnelly, Rebecca and John Voyles Professor of Architecture, supported by a University I-CARES grant, has completed his first round of Phase Change Material (PCM) research, which uses PCM membranes to enhance performance characteristics of contemporary enclosure systems, thus improving the energy efficiency of buildings.

Derek Hoeferlin, now Assistant Professor in Architecture, and Ian Caine, lecturer in Architecture, collaborated on one of the six winning proposals in the Rising Tides competition, which called for ideas responding to sea-level rise in San Francisco Bay and beyond. Hoeferlin also organized the panel discussion *NL-StL-NO: A Dialogue about Water's Implications for Design and Infrastructure*, which featured Renée Jones-Bos, Ambassador of the Netherlands to the United States.

Eric Mumford, professor of Architecture, recently published *Defining Urban Design: CIAM Architects and the Formation of a Discipline, 1937-69* (Yale University Press), which received an honorable mention for the 2009 PROSE Award in the Architecture and Urban Planning category. He also wrote the historical sections of the book *The Missouri Botanical Garden Climatron 50: A Celebration of 50 Years*, which chronicles the history and significance of the St. Louis landmark.

Jenny Lovell, assistant professor of Architecture, recently completed the book, *Building Envelopes: An Integrated Approach* (Princeton Architectural Press), a process-based toolkit for both practitioners and academics that advocates designing envelopes in an integrated way. She was awarded a 2008-09 Sam Fox School Faculty Creative Activity Research Grant to support the project.

Robert McCarter, Ruth & Norman Moore Professor of Architecture, currently has at press *Wiel Arets at Work, Carlo Scarpa,* and *Aldo Van Eyck.* He received a Sam Fox School Faculty Creative Activity Research Grant for his study of Aldo Van Eyck.

A recipient of a 2008-09 Faculty Creative Activity Research Grant, Heather Woofter curated *Metabolic City*, an exhibition at the Kemper Art Museum that explored conceptual overlaps in the 1960s work of the Japanese Metabolists, the British architecture collaborative Archigram, and the Dutch artist Constant. Woofter and Sung Ho Kim, associate professor of Architecture, also published two books focused on their architecture design studio, *Axi:Ome LLC: Spatial Practice* (Oro Editions), and *Specular: Between Practice and Education* (Damdi Architecture Publishing Co.).

Lecturer Esley Hamilton became only the second person to receive the H. Meade Summers Award from the Landmarks Association of St. Louis in recognition of the fact that, for a third of a century, Hamilton has been the region's most prominent and energetic preservation historian.

Associate Professor Igor Marjanovic is co-author, with Katerina Ruedi Ray, of the critically acclaimed *Marina City: Bertrand Goldberg's Urban Vision* (Princeton Architectural Press, 2010), the first book-length history of the Chicago architectural landmark.

Kathryn Dean, professor and director of the Graduate School of Architecture & Urban Design, is author of *Dean/Wolf Architects: Constructive Continuum* (Princeton Architectural Press), which showcases 14 of the firm's projects in detail with photographs, drawings, and renderings.

Associate Professor Peter MacKeith published *Archipelago: Essays on Architecture* in 2006. He was co-PI on a 2006-2010 $2,000,000 NSF research grant, working with the School of Engineering, Department of Computer Science, to develop studio-based teaching models in computer science education. He was venue exhibition coordinator for the traveling exhibition, *Eero Saarinen: Shaping the Future*, and, together with Professor Eric Mumford and Senior Lecturer Don Koster, the recipient of a 2008 Graham Foundation grant to support the research and exhibition of *On the Riverfront: St. Louis and the Gateway Arch.* He was appointed editor of *The SOM Journal* in 2011.

Community Engagement

Don Koster, senior lecturer in Architecture, is collaborating with WU's School of Medicine and community partners on *Nourishing an Urban Community: Phase I*. Supported by a grant from WU's Institute for Public Health, the project seeks to establish sustainable, community-based gardening, nutrition, and fitness programs for residents of The Ville community, emanating from a local garden marketplace.

Jodi Rios, senior lecturer in Architecture and Institute for Public Health (IPH) faculty scholar, is working on *Health Impact Assessment: Promoting Health Priorities in Policy, Planning and Design*. The project will provide decision-makers in Pagedale with recommendations on how to reduce health inequities. Rios is focusing on the impact the built environment has on community health. The research is being conducted in collaboration with WU's School of Medicine and School of Social Work, Beyond Housing, and community members, and is supported by grants from the IPH, the Robert Wood Johnson Foundation, and WU's Center for Social Development.

Derek Hoeferlin has led a series of Architecture studios at the undergraduate and graduate levels titled *Gutter to Gulf***,** a collaborative study of water management strategies for New Orleans, led by the Sam Fox School, the University of Toronto, and

the group Dutch Dialogues. A key component of *Gutter to Gulf* is directly engaging students with the City of New Orleans via field trips and continued relationships with citizens and elected officials. The initiative's sustained efforts have helped advocate for the current Comprehensive Water Management Strategy for New Orleans.

As part of a Spring 2010 studio taught by Senior Lecturer Don Koster, 13 graduate Architecture students have been working on the uHome U City Project, which seeks to design, develop, and construct sustainable but affordable LEED Platinum homes in the Sutter Heights neighborhood, in partnership with Arcturis and Green Space Construction.

John Hoal, associate professor of Architecture and IPH faculty scholar, has led urban design studios in the Tijuana River watershed, where groups of graduate Architecture students have worked with local partners. The result of those collaborative efforts, the Laureles Canyon Revitalization Project, received a Smart Growth Award from the Urban Land Institute of San Diego/Tijuana and an Honor Award from AIA St. Louis. Hoal's firm, H3 Studio, also received a Merit Award from AIA St. Louis in the Unbuilt category for the design of Taylor Playground.

Lecturer Wayne Mortensen was awarded the Enterprise Rose Architectural Fellowship in fall 2010, and will spend the next three years working with Neighborhood Progress, Inc. (NPI), in Cleveland, Ohio, to promote affordable housing and sustainable development policy.

A joint submittal by Graduate School students and MIT students placed second in the 2009 Chase Community Development Competition, which challenges student teams to partner with a New Orleans non-profit organization to develop a real estate project that strengthens the local community, with an eye toward sustainability. Titled *Broad Street reFresh: A Fresh Food Hub for Community, Health, and Economic Development*, the proposal centered around the redesign of and reinvestment in an existing grocery store on historic Broad Street in New Orleans. The grocery store has been closed since Hurricane Katrina struck in 2005. The team worked in conjunction with Broad Community Connections, a local non-profit focused on the revitalization of the Broad Street corridor, and were guided by faculty advisors Derek Hoeferlin, now assistant professor at the Sam Fox School, and Karl Seidman, senior lecturer at MIT.

A team of Sam Fox School Architecture students took third place in the National Association of Minority Architects (NOMA) Student Design Competition for the project *The Spark that Weaves: Intertwining Family and Neighborhood in Benton Park*. The student team featured six graduate Architecture students—Eduardo Ponce, Jonathan Stitelman, Brad Cooke, Roberto Jaime Deseda, Ekta Desai, and Jeffrey Sullivan—and freshman Architecture student Ryan A. Wilson. Their accomplishment was recognized at NOMA's annual meeting, hosted and organized by the St. Louis Chapter of NOMA.

Service

Bob Hansman, associate professor of Architecture, gave the keynote address at WU's Martin Luther King, Jr. Celebration, where he received the Rosa L. Parks Award for Meritorious Service to the Community. Hansman is the founder of City Faces, a program designed to bring art to teenagers and young adults living in public housing.

Gay Lorberbaum, senior lecturer in Architecture, was among five recipients of the 2009 Gerry and Bob Virgil Ethic of Service Award. Founded during WU's sesquicentennial year, the award annually recognizes a select group of University community members that exemplifies a character of service and giving to the St. Louis region. For Lorberbaum, teaching is a way to serve her community and to learn. During her 34 years at Washington University, she has taught classes in both Architecture and

Psychology in Arts & Sciences. In 2003, she created the New School—a group workshop that combines psychotherapy with creative process.

Dean Bruce Lindsey serves on the governance group for CityArchRiver 2015 Foundation, the non-profit organization coordinating efforts to improve connections between the Gateway Arch, downtown St. Louis, and the Mississippi Riverfront. Dean Lindsey has also served as an external evaluator for the National University of Singapore and the McGill School of Architecture.

Peter MacKeith, together with Sam Fox School Dean Carmon Colangelo, organized and moderated the 2009 ACSA Administrators Conference*, Economies in Art and Architecture*, held in conjunction with the National College Art Administrators conference. MacKeith also served on the NAAB visiting team for Pratt School of Architecture in spring 2010 and as an invited observer to the NAAB Visiting Team for the Ohio State University School of Architecture NAAB review in spring 2011.

Teaching

Igor Marjanovic, assistant professor of Architecture, was granted a 2009 Education Honor Award from the AIA for *Intersections of Art and Architecture in Florence*, an interdisciplinary class offered as part of the Sam Fox School's Florence summer program.

Robert McCarter, Ruth and Norman Moore Professor of Architecture, was named one of the ten best educators in American schools of architecture in the education issue of *Architect* magazine (December 2009).

WU's Institute for Public Health (IPH) has appointed John Hoal and Jodi Rios faculty scholars. These scholars, appointed for three-year, renewable terms, have been chosen on the basis of their research and teaching interests in public health and willingness to engage in collaborative work with other institute scholars.

DesignIntelligence named Bruce Lindsey, Dean of the College of Architecture and Graduate School of Architecture & Urban Design, one of the Most Admired Educators of 2009. Dean Lindsey teaches several courses engaging students and communities outside the Graduate School.

Peter MacKeith received a Creative Achievement in Design Education Award from the ACSA in 2008.

Paul J. Donnelly was honored as an ACSA Distinguished Professor in 2007, in recognition of his eminent contribution to architectural education.

Opportunities Supporting the Development of New Knowledge

The Sam Fox School Research Office fosters a culture of research and creative activity by working with faculty and students across the School to define projects, seek funding, and identify internal and external partnerships to support research and creative activity. The Office works to facilitate the pre- and post-granting process; serves as liaison to the broader research infrastructure of the University; and gives advice on institutional compliances during projects. While institutional funding is important to furthering projects, the Office also assists with a broad range of activity that includes partnerships that contribute to the research culture of the School.

Since 2006, Architecture faculty have received over $639,366 in project support for research and creative activity; twenty-four faculty members have submitted applications to either internal or external funding sources and 44 discrete project have been funded.

Many projects engage students and range from material testing to community engagement and assessment projects.

University Annual Funding Opportunities Relevant to Architecture:

International Center for Advanced Renewable Energy and Sustainability (I-CARES)
(Amount: Up to $50,000, Architecture Grants: 4 since 2008)

Skandalaris Center for Entrepreneurial Studies
(Amount: Up to $20,000, Architecture Grants: 3 since 2006)

Office of Provost Cross-School Interdisciplinary Teaching Grant
(Amount: Up to $50,000, Architecture Grants: 2 since 2006)

Gephardt Institute for Public Service
(Amount: Up to $5,000, Architecture Grants: 3 since 2006)

Institute for Public Health (IPH)
(Amount: Up to $20,000, Architecture Grants: 1 since 2009)

Brookings Institution/Washington University Academic Venture Fund
(Amount: Up to $50,000, Architecture Grants: 1 since 2010)

McDonnell Academy Global Energy and Environment Partnership (MAGEEP)
(Amount: Up to $40,000, Architecture Grants: 1 since 2006)

Bear Cub Fund by the Office of Technology Management
($240,000 in annual funding awarded)

Sam Fox School Annual Funding Opportunities for Architecture:

Faculty Creative Activity Research Grant
(Amount: Up to $8,000, Architecture Grants: 9 since 2007)

Graduate Student Travel Grants
(Amount: Up to $1,000, Architecture Grants: 5 since 2009)

Laskey Award to College of Architecture and Graduate School of Architecture & Urban Design
(Amount: Annual award up to $5,000)

Steedman Fellowship
(Amount: $30,000 Award, international but also open to Sam Fox School)

GHOSTlab Student Participation Grant ($1500)

External Support for Architecture

(Agencies that awarded support 2006-2011):

Centers for Disease Control
Department of Transportation
Graham Foundation
Housing and Urban Development
National Endowment for the Arts
Robert Wood Johnson Foundation

External Funding for Architecture Identified by the Sam Fox School Research Office:
(Asterisk* indicates an application for funding was submitted 2006-2011)

ACLS Collaborative Research Fellowships
AIA Upjohn Research Initiative *
American Academy in Rome
Beverly Willis Architecture Foundation
Boston Foundation for Architecture
Building America — Resources for Energy Efficient Homes (under the DOE)
Center for Architecture Foundation: Arnold W. Brunner Grant
Center for Architecture Foundation: Stewardson Keefe LeBrun Travel Grant
Centers for Disease Control *
Department of Transportation *
Environmental Protection Agency *
Furthermore Foundation *
Graham Foundation *
Housing and Urban Development *
HUD-DOT-EPA Partnership for Sustainable Communities *
James Marston Fitch Charitable Foundation
John Simon Guggenheim Memorial Foundation
Kresge Foundation *
Latrobe Prize *
Missouri Health Foundation *
National Endowment for the Arts *
National Endowment for the Humanities *
National Institute of Health *
National Science Foundation *
Rafael Viñoly Architects Training and Research Programs
Robert Wood Johnson Foundation *
Rotch Traveling Scholarship *
Surdna Foundation *
The American Architectural Foundation, Inc.
U.S. Department of Energy's Solar Decathlon
Van Alen Institute — Projects in Public Architecture *
Whitaker Foundation

Student or Recent Graduate Focus
(Funding Awarded to Sam Fox School Architecture Students or recent Alumni)

AIA Arthur N. Tuttle Jr. Graduate Fellowship in Health Facility Planning and Design
Enterprise Rose Architectural Fellowship
Fulbright Fellowship
Rotch Traveling Studio
SOM Foundation

B. Architectural Education and the Students

"The Graduate School of Architecture & Urban Design at Washington University in St. Louis cultivates the designer's identity as a leader: as both an expressive individual and a socially responsible citizen."

These first words in the 2011-2012 Graduate Bulletin (resounding those of the previous Bulletins) indicate the primacy of two affiliated developmental emphases in the ethos of the School: the individual student's creative identity and the importance of design leadership in the profession and in society. Bridging between these emphases is the charge to prepare the student to work productively and responsibly with the dynamic complexities and issues of the built environment across scales and across cultures. This is an education rooted in the humanist traditions of the discipline, and the history and strengths of the University, yet also one preparing students for the social, economic,

technological, and environmental challenges of the contemporary moment and the longer future.

Such intentions and ambitions are substantiated for students through an evident diversity among both students and faculty—in gender, cultural, geographical, and educational background. Simultaneously, throughout that diversity, an equally evident supportiveness and community sensibility prevails—"the culture of the School." The faculty is actively engaged in teaching, research, creative practice, and public service; their roles as advisors, mentors, and basic support extend well beyond the point of graduation. A global outlook of tolerance, responsibility, sensitivity, and responsiveness is also realized through the Graduate School's extensive program of visiting scholars, instructors, and studio critics and intensified through the rich array of international semesters in Europe, Asia, and South America.

The curricular and community emphasis on leadership is framed by the trajectory of semesters culminating in the independent final Degree Project, by extensive opportunities for teaching and research assistance positions, by a vigorous public lecture series of leaders in academia and the profession, and by active student governance organizations. Multiple opportunities exist for students to realize their academic and professional ambitions through summer research grants, creative research grants, and Steedman Travel Grants, as well as through the resources of a well-supported and energetic Career Services office, an informed IDP coordinator, a supportive local AIA chapter, a large alumni network (providing an expanding internship program), and significant professional practice relationships.

C. Architectural Education and the Regulatory Environment

The Graduate School places a fundamental emphasis on design leadership and entrance into the profession of architecture. This emphasis is structured through reference to internship and licensing in the pre-admissions process and in the initial presentations of the curriculum to enrolling students, as well as the consistent presentations of the internship and licensing procedures made to students by the Career Services Specialist and the Graduate School's IDP Coordinator. The IDP Coordinator attends national conferences and provides consistent information on the evolution of IDP requirements. Further, the Graduate School's leadership (Dean, Director, Program Chair, and senior faculty), licensed members of the greater faculty, alumni, and the local professional community are all positive models for students in these regards. Students are additionally made aware of the international regulatory contexts through the Graduate School's international semesters. The professional practice sequence of coursework highlights these aspects in particular and reinforces the principles of professional responsibility. The Graduate School maintains strong relationships with the St. Louis AIA, and provides continuing education credits through the Public Lecture Series and LEED workshops.

D. Architectural Education and the Profession

The Master of Architecture program has a longstanding and intimate relationship with the profession. The directors of the graduate program from 2003 to 2008 were both award-winning practicing architects: Adrian Luchini and Paul Donnelly. The current director, Kathryn Dean, continues this tradition as a partner in Dean/Wolf Architects and has recently published a monograph on the work of her firm. Additionally, many of the tenured faculty members are currently practicing architects with significant commissions, awards, and publications. The School also engages practicing architects, engineers, and technical consultants from the St. Louis community as part-time faculty who make significant contributions to the expertise offered by the School. Every semester, architects with practices of national and international standing are invited to teach as visiting professors to the School.

These professionals and practitioners in the school encourage a vibrant cross-pollination between academia and the profession. Recognizing that cutting-edge architectural practice is always changing, the Graduate School invites leading consultants to lead workshops for students as a means to bridge between innovative practice and academia. Recent workshops have included: Michael Ra, curtainwall consultant of Front Architects in Los Angeles; Uli Knacht, sustainability consultant of TU Delft; and Oliver Schulze, urban design expert with Gehl Architects of Copenhagen, Denmark.

Career Services Specialist Erika Fitzgibbon has led efforts to create ties between professionals and students at both graduate and undergraduate levels. She organizes colloquia on the profession, an annual career fair, and individual interviews. In addition, the Career Services Specialist provides aid with portfolio development and resume writing. Together with the Director of Alumni and Development for the School, the Career Services Specialist also organizes graduate student visits to architectural offices in St. Louis, Chicago, and New York.

E. Architectural Education and the Public Good

Students of the Graduate School of Architecture & Urban Design are "prepared to be active, engaged citizens" through a number of curricular, research, and outreach activities. These culminate in the final design studio Degree Project, for which students are encouraged to site their projects in St. Louis. Through the preparatory Design Thinking course (ARCH 580) students tour the city, select sites, and define problems and programs in response to the urban condition and population of St. Louis. In the past five years, well over 300 projects have explored and proposed solutions toward the evolution of the city.

A number of courses and experiences, several of which are outlined here, focus on civic engagement and a commitment to professional and public service. Professional ethics are introduced in the Professional Practice course (ARCH 646). The Urban Development Seminar (ARCH 564A) connects student and faculty teams from Washington University and St. Louis University representing social work, law, urban planning, and architecture with not-for-profit groups to develop community initiatives. Jodi Rios, senior lecturer, and Ian Faulkner, adjunct lecturer, have led work in the North St. Louis community of Pagedale that has resulted in neighborhood landscaping projects and the design of a community orchard. Senior Lecturer Don Koster, in an advanced option studio along with local architecture office Arcturis, engaged students in the uHome U City project described earlier. Along with a community developer and a contractor, students designed five LEED platinum houses for the nearby Sutter Heights neighborhood of St. Louis, each with a project budget under $200,000. Professor Emeritus Carl Safe has led three advanced option design-build studios that have resulted in structures for two public parks and a public golf course. One of the parks was in Pagedale and grew from Jodi Rios's course Reconsidering the Margins (ARCH 563D). Last spring, graduate students worked with sculpture professor, Ron Fondaw, and urban design associate professor, John Hoal, in the context of the course Public Space and City Life: Ackert Walkway Case Study to help develop a new vision in University City for a pedestrian corridor in need of community revitalization. The project was part of larger planning and development effort including local and national organizations and granting agencies.

In 2009, Assistant Professor Patty Heyda led a charrette of graduate Architecture and Urban Design students that looked at the connection of Saarinen's iconic Arch grounds to the city, the river, and across the river to East St. Louis. The three-day charrette, held downtown, involved four universities, architecture, landscape architecture, transportation planning, and art students, city and regional officials, as well as local practitioners. The charrette concluded with an exhibition of the work and a public presentation. Associate Professor Peter MacKeith along with nationally acclaimed ecological artist Jackie

Brookner led a year-long workshop with an interdisciplinary team of Art and Architecture students titled "Public Art and Ecology: A Watershed Project for the Confluence." Students in the masterclass were engaged in the development of a public space/environmental art project along the Riverfront Trail at North Trailfront Park.

City Studio, an initiative outlined in *Design for Excellence*, the Sam Fox School's strategic plan, is currently under development. City Studio, in partnership with the University's Skandalaris Center for Entrepreneurial Studies, will provide curricular opportunities and administrative support for learning experiences in partnership with communities, non-profit organizations, and public groups throughout the city. A precursor to the formal City Studio, CityStudioSTL was a three-week workshop held in July 2011 that was led by acclaimed artist Theaster Gates in the North St. Louis neighborhood of Hyde Park. Titled *Somethingness: Ways of Seeing and Building,* this program brought together art, architecture, and social work students and faculty to design and renovate a small structure intended to support a community-based art program for children.

The Graduate School has developed symposia and exhibitions reflecting the ethical and social responsibilities of designers in a dynamic and changing world. The Mildred Lane Kemper Art Museum was home to a show in its teaching gallery in 2009 entitled *A Challenge to Democracy: Ethnic Profiling of Japanese Americans During World War II*, which included work by Ansel Adams, Roger Shimomura, and Chiura Obata, father of Gyo Obata, alumus and co-founder of HOK. The exhibition included concerts, poetry readings, discussions, and theatrical performances to amplify its exploration of profiling and intolerance. *Architecture, Art, and the Experience of Blackness* was a symposium organized by Associate Professor Igor Marjanovic in March of 2008. The symposium brought noted artists, architects, and curators to St. Louis, "whose work intersects with race and identity, providing an opportunity for critical reflection."

The Alberti Program - Architecture for Young People brings more than 50 fourth- through ninth-grade students from over 15 St. Louis public schools to Givens Hall each Saturday during the academic year to explore environmental ethics and design through hands-on studio-based projects. Led by Senior Lecturer Gay Lorberbaum, the program employs over 15 graduate and undergraduate teaching assistants each semester. For students and teachers alike, the program is a transforming experience, giving St. Louis youth a thoughtful introduction to the field of architecture and demonstrating the potential of "Architectural Education and the Public Good."

EXHIBIT A I.1.3 Matrix Cross-Referencing Long-Range Planning and Self-Assessment to the NAAB Perspectives

ASSESSMENTS PLANNING	A. The Academic Community	B. Students	C. Regulatory Environment	D. The Profession	E. The Public Good	ARCHITECTURE INITIATIVES	
FOCUS						COLLEGE	GRADUATE SCHOOL
Curriculum	X	X				SFS Foundation Year	Interdisciplinary Expansion / Core Review / Environmental Systems and Technologies coursework
Degrees	X	X				BDes-Architecture, BDes	MLA, MSAAD, MSAS, MUD (greater emphasis), PhD (in development)
Resources	X	X			X	Faculty appointments / Digital Initiatives / Museum	
Local		X		X	X	City Studio StL / U-House / Alberti / Pagedale	
Global	X	X			X	International Semesters	International Semesters / McDonnell Academy / Admissions Expansion / Studio Travel
Knowledge	X	X		X		SFS Research Office / SFS Creative Research Grants / I-CARES, MAGEEP, Skandalaris, Brookings Institution	
Future	X	X	X	X		Design Internship Network Program, Space Planning / Facilities Expansion	

I.1.4 LONG-RANGE PLANNING

Long-range planning for the College and Graduate School of Architecture & Urban Design is undertaken in concert with similar efforts for the College and Graduate School of Art and the Mildred Lane Kemper Art Museum. This work informs long-range planning for the Sam Fox School, led by Dean Colangelo with substantial input from the School's National Council. Dean Colangelo represents the School's planning efforts at the University level as a member of the University Council, which facilitates ongoing discussions of University-wide planning, assessment, and prioritization of strategic initiatives. Dean Bruce Lindsey, in partnership with the Director of Graduate Programs Kathryn Dean and the Chair of Architecture Heather Woofter, leads ongoing long-range planning efforts for the Graduate School of Architecture.

As mentioned in Section I.1.1, the Sam Fox School engaged in a comprehensive strategic planning process from 2006 to 2008, including faculty, administrators, and volunteer leaders, which resulted in the 10-year *Design for Excellence* plan. In January 2007, as part of this planning process, Dean Lindsey appointed four faculty working groups led by faculty co-chairs. The working groups included faculty, staff, and student representation. These groups were charged with identifying strategic initiatives for the Architecture program to be included in the planning discussion. The four working groups were: *Networks*, teaching and research, *Topologies*, environment and technology, *Ecologies*, people and community partnerships, and *Practice*, programs and curriculum. The Dean of Art and the Director of the Mildred Lane Kemper Art Museum appointed similar groups. In March 2007, a faculty retreat of Art, Architecture, and Museum staff was held to discuss the findings of the working groups. The discussion led to the final set of strategic objectives and priorities that are set forth in the *Design for Excellence* plan. Architecture-specific objectives outlined in the plan, along with references to the relevant "five perspectives," include the following:

1. Rename the Bachelor of Arts degree the "Bachelor of Design, Major in Architecture" and develop a new interdisciplinary Bachelor of Design degree (perspectives A,D,E).
2. Revise the undergraduate Bachelor of Science and the new Bachelor of Design degrees to reflect a shared foundation year with Art students.
3. Grow the graduate Architecture program by 12 students.
4. Develop a formalized internship program for graduate and undergraduate students (perspectives C,D).
5. Strengthen the Master of Urban Design (MUD) curriculum to reflect global and environmental emphases (perspectives A,B,D,E).
6. Start a professional Landscape Architecture graduate program offering dual degrees with Urban Design and Architecture (perspectives D,E).
7. Develop a doctoral program in architectural history and theory (perspectives A,B,E).

Data and information used to inform Architecture strategic objectives in this process came from a peer institution benchmarking exercise as well as analytical use of ACSA and NAAB statistics. Peer institutions were identified relative to the top ten programs as ranked by *DesignIntelligence* and are cited in the *Design for Excellence* plan. Associate Professor Heather Woofter and Associate Professor Igor Marjanovic (at the time both core coordinators) undertook further planning research by visiting and interviewing faculty and administrators from six peer institutions across the country. Information from these visits informed the development and refinement of the learning objectives for both undergraduate and graduate core studio courses.

Ultimately, the reports developed by the Architecture faculty working groups during the 2006-2008 strategic planning process became a framework for subsequent and ongoing

discussion and planning. The five perspectives (cross referenced in the initiatives above) serve as a guidepost and a benchmark for the setting of objectives and priorities. Architecture planning discussions and decisions have become integrated into the administration of the School and occur in Architecture Cabinet meetings (see section I.2.2), faculty meetings, and curriculum committee meetings. In addition, All-School Reviews have emerged as a particularly effective vehicle for self-assessment and planning.

All-School Reviews are semester-end, day-long reviews of specific aspects of the degree program curricula. Faculty present course sequences, pedagogy, learning objectives, and course products in a critique and discussion setting, which provides a forum for comparison and evaluation. Four All-School Reviews have occurred over the past four years covering the following areas:

- Graduate core, option and degree project studio offerings (December 2007)
- Undergraduate studio sequence (May 2008)
- Graduate required courses, electives, and faculty research (August 2009)
- Graduate core, Design Thinking, and degree project studios (May 2011)

An All-School Review that will focus on option studios and dual degree requirements will occur in December 2011. Revisions to the graduate curriculum that have developed from these discussions include: a housing focus for the final core studio (419); revision of the minimum grade requirement for successful completion of the core sequence; redesign of the technology sequence and courses; and most recently, proposed refinements to the Design Thinking course and support for Degree Project students and faculty.

Additional objectives that have been developed from the *Design for Excellence* working groups and through the ongoing process of Architecture planning include:

1. The development of a Master of Science in Architectural Studies.
2. The development of curricular and facilities support for the advancement of digital fabrication within the graduate program.
3. The advancement of funded research within the Graduate School through the development of research centers.
4. Continued development, improvement, and implementation of international programs including the development of a new program in Seoul, Korea and Shanghai, China.

The Graduate School is making progress on each of these strategic objectives and continues to refine its priorities through the long-range planning process.

I.1.5 SELF-ASSESSMENT PROCEDURES

The Graduate School of Architecture & Urban Design benefits from a continuous and ongoing process of self-assessment that includes University, Sam Fox School, and Graduate School efforts. Objectives identified through long-range and on-going planning processes set the context for self-assessment. The Sam Fox School's *Design for Excellence* is periodically redistributed to faculty for discussion. Progress in meeting objectives is discussed at both the Sam Fox School level and the program level through cabinet meetings, faculty meetings, and discussions among faculty, deans, chairs, and coordinators. The Dean of the Sam Fox School provides formal reports on progress of the plan to the Chancellor, the Provost, and the National Council. The Dean of the Sam Fox School and the Dean of Architecture both travel frequently to meet with alumni to better understand the national and global context of architectural education and practice

and to hear first-hand alumni perspectives on the education they received from the School.

Assessment Tools

SWOT Analysis: From 2006 through 2009, an annual SWOT (Strengths, Weaknesses, Opportunities, Threats) analysis was prepared by the Dean of Architecture for the Dean of the Sam Fox School as part of a yearly University review of programs. The analysis became part of discussion related to general ongoing planning and, more specifically, to the *Design for Excellence* strategic planning.

National Council: The National Council is an advisory board to the Sam Fox School consisting of alumni, distinguished practitioners, and friends of the School. A Council Chair presides over the group, which consists of sub-councils representing Architecture, Art and the Museum, each with their own sub-chair, who works in cooperation with the respective dean or director. The Council meets twice each year to discuss strategic directions, initiatives, and to provide feedback and assessment of progress and priorities.

Annual Professional Activities Reports: An annual report outlining teaching, service, and research/creative activity is required of all faculty and submitted to the Dean of Architecture at the beginning of the following academic year. The report is used by the Dean to write yearly faculty evaluation letters. The Dean of Architecture meets individually with faculty as a follow up to the evaluation letter and to discuss teaching assignments and research priorities for the coming year.

Accreditation and National Discourse: Annual reports and national forums related to accreditation form a basis for discussion and evaluation within the graduate program. Professors MacKeith and McCarter have served as members of accreditation teams providing valuable insights into general issues of architectural education and accreditation. Dean Lindsey serves as an external examiner for the Architecture program at the National University of Singapore and has served as an external examiner for the program at McGill University. Participation in these visits and the general program understandings achieved provide context for program evaluation and benchmarking. In 2010, the Sam Fox School and the Graduate School hosted a joint ACSA and Arts Administrators Conference, the first of its kind. The conference, attended by over 200 art and architecture higher education administrators, provided a venue for both formal and informal conversation about the direction of architecture and art education.

Visiting Faculty: As one of the Graduate School's significant resources, visiting faculty provide a continuous source of feedback and evaluation relative to other programs, disciplinary trajectories, and professional demands. In the past two years, the Graduate School has averaged three visiting faculty per semester. These faculty represent diverse practices and creative experience and provide a broad range of feedback on programs, courses, and student achievement. Faculty who teach in the international programs are routinely invited to attend reviews at the Graduate School and provide an international perspective on programs in St. Louis, contributing to their understanding of standards, expectations, and coordination.

Final Reviews: Graduate Architecture final reviews include local, national, and international guest critics (15-20 each semester) who participate in the discussion and review of student studio work. The Graduate School recently implemented a survey process for guest critics soliciting written feedback about program strengths and areas for improvement.

Student Course Evaluations: Course evaluations are submitted each semester for all courses in the Graduate School. Evaluations are available to faculty and to the Dean for review. Course evaluation results are used in yearly faculty evaluations as well as tenure and promotion reviews.

Student Leader Lunches: The Dean of Architecture and program leaders meet monthly with undergraduate and graduate student leaders to facilitate communication, discuss initiatives, and work to address problems and concerns. Students are represented at the undergraduate level by elected student leaders of the Architecture School Council and at the graduate level by elected student leaders of the Graduate Architecture Council.

Year End Exhibition: In the past two years, students have organized year-end exhibitions of work by graduating undergraduate and graduate students that reveal a comprehensive cross-section of course activity. The exhibitions provide context for faculty discussion and informal evaluation that informs more structured processes of evaluation and strategic planning. Alumni and professionals are invited to the opening celebrations, and the exhibitions are coordinated with commencement to garner a large viewing audience.

Results

While there is lively debate as to the correct balance of critical skills, experimentation, and professional preparation within architecture education, the faculty and Graduate School are committed to an experience that allows students to be effective in the profession from the time of graduation. Design becomes the synthetic process of both designing and thinking, requiring technical competence, theoretical and historical perspective, international awareness, and an understanding of the complex context of professional practice.

Feedback from students has been very positive regarding their experiences, citing excellent faculty dedication and support, good technical resources, diverse and numerous international programs, strong career services, and diverse faculty interests as strengths. Challenges include crowding from recent growth, lack of storage space, difficulty in getting desired elective courses, and managing the number of options and programs available, especially for dual-degree requirements. Students and faculty alike benefit from an engaged Graduate Architecture Council that works effectively as an advocate for students and organizes social and professional activities. Examples of activities organized with substantial student management and involvement include Student Orientation, Graduate Open House, weekly Happy Hour, computer tutoring, and technical facilities operations and management.

The concerns over growth and space have been addressed in several ways. First, Architecture has expanded by adding studio space in Steinberg and Walker Halls. The program has secured classroom space, studio space, and faculty office space in a renovated University facility, the Forsyth House, across the street from the Sam Fox School complex. In addition, the Sam Fox School has completed a comprehensive space analysis with seasoned campus planners Ayers Saint Gross of Baltimore that is being used to advance planning for a new building (5-7 year timeline) to house all Sam Fox School graduate students and programs as well as new faculty offices and research space. The new building would allow for the return of the graduate Art students who are currently housed in Lewis Center, a facility located one mile from the Sam Fox School.

Developments in the curriculum since the last NAAB visit that stem from the planning and assessment processes include:

- an increased emphasis on sustainability in all areas
- increased technical emphasis in the environmental and buildings systems courses

- increased opportunity for study in digital design and fabrication
- a requirement for an additional comprehensive design studio
- increased opportunity for interdisciplinary courses and experiences.

The demands of the Design Thinking course and its coordination with the final Degree Project Studio are also matters of ongoing assessment and refinement, but they remain unique and well-supported hallmarks of the School. Two Master of Science degrees, one in advanced architectural design and the other in architectural studies (history/theory and architecture pedagogy), have recently been approved to address student interest in developing depth in individualized areas of study. The development of a PhD program is also underway.

In response to the strategic planning process and to feedback from alumni and students, the Architecture program has implemented a new Design Internship Network (DIN). In partnership with Career Services, the DIN helps to promote and connect students with firms that have a need for interns. Internships can range from one week to one year and are aimed at helping students be as competitive as possible in a challenging and dynamic professional environment. The network is being carefully cultivated, beginning with firms that have alumni in leadership positions, with the goal of reaching 100 participating firms by 2011-2012. To date, significant progress has been made toward this goal.

Feedback from the professional community has encouraged a more concerted effort to better connect the School to the professional community in the region. This has happened by offering the School as a venue for events, partnering with organizations and offices on projects, offering continuing education credits for lectures, organizing regular office visits, and broadly working to include the professional community in the life of the School. The School benefits from a strong professional community, and as described earlier in this report, particularly enjoys participation from a number of practicing professionals who serve as adjunct faculty. The Dean of Architecture is a member of the St. Louis AIA chapter, an affiliate member of the St. Louis ASLA, and a board member of the Downtown Partnership and the Missouri Gateway Chapter of the USGBC. As a member of the University Buildings and Grounds committee, the Dean has advocated effectively for the inclusion of local firms on University RFPs. The Graduate School encourages the broad participation of faculty in professional organizations and the regional community of practice.

I.2 RESOURCES

I.2.1 HUMAN RESOURCES AND HUMAN RESOURCE DEVELOPMENT, FACULTY

EEO/AA for Faculty, Staff, and Students

The Human Resources Office at Washington University has established an "Equal Opportunity Affirmative Action Policy."

A memo to all Washington University employees from Chancellor Mark Wrighton was sent on January 14, 2010 to reaffirm the University's commitment to equal employment opportunity and affirmative action, to define the terms of the University's policies regarding these initiatives, and to outline responsibility and implementation of these policies.

Diversity Initiatives

Washington University and the Sam Fox School have each developed a wide rage of initiatives aimed to create more diversity on campus and to encourage working and learning environments that are welcoming to the broadest range of faculty, staff, and students. Refer to Section I.1.2 for an overview of these efforts.

One of the most important diversity initiatives at the Sam Fox School since the last APR has been a thoughtful examination of faculty search procedures. In October 2010, the tenured and tenure-track faculty of the Sam Fox School voted to revise its faculty search policy, part of the School's "Policy on Faculty Appointment, Retention, Tenure, and Promotion," to reflect a greater commitment to incorporating women and underrepresented minority applicants into its recruitment procedures. The new policy states, "*The faculty at the Sam Fox School is committed to an objective and broad search process that yields diverse candidates and extends the intellectual, cultural, and social boundaries of the School. The University does not discriminate in access to, or treatment or employment in, its programs and activities on the basis of race, color, age, religion, sex, sexual orientation, gender identity or expression, national origin, veteran status, disability, or genetic information*."

A significant revision to the search process is the addition of a diversity outreach plan and a Diversity Chair for each search:

"The standing chair of the Sam Fox School Fairness and Diversity Committee will serve as a non-voting, consulting Diversity Officer to all search committees. The Diversity Officer will work in tandem with the chair and members of the committee to address aspects of diversity related to the search, including outreach efforts and monitoring the diversity of the candidate pool. The Diversity Officer will help ensure that the chair and the committee fulfill the following responsibilities, including the following:

- *Work with the Vice Provost to ensure best practices for diversity and contact appropriate on-campus committees and offices for information and resources to assist with developing a diverse and strong applicant pool.*
- *Consult relevant publication lists and databases to identify potential candidates, identify appropriate venues for advertising, and generate mailing lists for distribution of job description.*
- *Advertise in selected specialty journals, organizations and websites such as those targeted to women and minorities.*
- *Consult with Washington University faculty colleagues (particularly women and minorities) for advice on effective outreach strategies and potential candidates.*
- *Contact colleagues elsewhere for suggestions of promising minority, women, and other candidates.*
- *Contact the college's alumni, making sure to include women and minority alumni, as potential candidates, or for suggestions of other potential candidates.*
- *Approach women or minority candidates who may be considered unavailable; assumptions should be verified through direct inquiry."*

Human Resource Development Opportunities

Faculty within the College of Architecture and the Graduate School of Architecture & Urban Design are encouraged to broaden their expertise in the classroom and in the field through a number of opportunities and resources:

School policy allows tenured and tenure-track faculty to engage in professional practice beyond their academic obligations, and 72% of the tenured, tenure-track, and affiliate faculty continue to hone their knowledge and skills through practice, ranging from work as a single practitioner to work with the world's largest corporate firms. Practice is valued among the School's faculty as a beneficial method for remaining current in the field and as an important tool for educating future practitioners.

The School's visiting lecture series, featuring distinguished architects, designers, and scholars is a source for AIA continuing education credits and an opportunity to broaden knowledge and deepen understanding across scholarly, theoretical, and practical facets of the field.

The School's active involvement in the local, state, and national AIA chapters presents numerous opportunities to engage with fellow practitioners, to seek professional development resources, and to track new directions in the field.

The School awards faculty development funds annually to each full-time faculty member, which allow for travel to professional conferences, research, and investment in classroom resources. Development funds for tenure-track faculty are viewed as particularly important, facilitating many of their efforts toward tenure and promotion. Funds average $2,000 per year for tenure-track faculty and $1,500 for tenured faculty. Named professors have development accounts averaging $5,000 per year, depending on their role within the School and the structure of the endowed professorship. In addition, the Dean of Architecture awards travel funds through a proposal review process to affiliate faculty for faculty development, conference attendance, and travel related to joint studios and projects.

The Dean of the Sam Fox School awards competitive Creative Activity Research grants, ranging from $1,000 to $8,000, which are intended to encourage new work or innovative directions in faculty creative activity and research. Since the inception of these grants in 2007, nine Architecture faculty members have received awards totaling $52,500 to pursue a wide range of projects.

The Dean of the Sam Fox School awards Outstanding Teaching Awards annually that recognize excellence in the classroom with $2,500 in faculty development funds. Since initiating the awards in 2008, four Architecture faculty members have been honored.

The Dean of Sam Fox School awards Outstanding Staff Awards annually that recognize outstanding service by staff members. Since the inception of the award in 2008 four Architecture staff have been honored.

Following six full years of academic service at the Sam Fox School, faculty members are eligible for sabbatical and other leaves of absence for the purpose of research, creative activity, and/or professional development. Since 2006, five Architecture faculty members have been granted sabbatical leave and one faculty member has taken an unpaid leave of absence for professional development purposes.

An established mentoring policy provides ongoing feedback and support for tenure-track faculty as they develop portfolios of creative activity, scholarly research, and teaching excellence. Mentoring works in tandem with the School's requirement for annual faculty reports outlining teaching, scholarship, creative activity, and service, which allow the Dean to broadly understand the realm of activity throughout the School and to individually assess progress toward tenure and promotion.

Faculty Development Activities

Faculty engage is a wide range of ongoing professional development activities, including the following:

Faculty member Jen Maigret led a noon faculty colloquia series throughout fall 2008 and spring 2009 on topics related to faculty research.

In association with the graduate studio led by Professor Robert McCarter and Visiting Professor Wiel Arets in spring 2010, four public colloquia featuring guests and faculty participants explored the following themes: Architectural Theory, Urban Design, Countryside/Metropolis, and Product Design. The discussions prompted by student questions will be published as part of a book on Arets' work written by Professor McCarter titled *Wiel Arets at Work*.

For over three years, faculty have participated and presented at the University-wide faculty colloquia series *City Seminar* led by Architecture Professor Eric Mumford and History Associate Professor Margaret Garb.

This fall and spring, a history/theory colloquia series led by Professors Mumford and Marjanovic will bring three national figures in history and theory to campus for discussions with faculty and students.

The Sam Fox School, with Associate Dean and Associate Professor of Architecture Peter MacKeith serving as co-chair, hosted the first joint conference of Art and Architecture higher education administrators, Economies, in fall 2010. Keynote speaker was John Maeda, president of the Rhode Island School of Design.

Over the past year, Architecture faculty member Ken Tracy led four faculty work sessions providing overviews of digital fabrication and related software, machine demonstrations, and an advanced workshop on mastercam software and file preparation for fabrication. Tracy is directing work in the Digital Initiatives Lab (DIL), supported through an investment from the Office of the Dean of the Sam Fox School.

Policies, Procedures, and Criteria for Faculty Appointment, Promotion, and Tenure

A significant achievement for the Graduate School of Architecture & Urban Design since the last NAAB accreditation visit has been the creation and validation of a unified *Policy on Faculty Appointment, Retention, Tenure, and Promotion* within the Sam Fox School of Design & Visual Arts. The policy was adopted in October 2007; the full document can be reviewed online (http://www.samfoxschool.wustl.edu/files/4_20tenure11.pdf).

The following faculty received promotion and tenure since the last NAAB visit: Peter MacKeith, John Hoal, Zeuler Lima, Sung Ho Kim, Heather Woofter, and Igor Marjanovic. Paula Lupkin's case for tenure and promotion was not successful. Eric Mumford and Stephen Leet were promoted to full professor. Dorthothée Imbert, Kathryn Dean, Robert McCarter, and Bruce Lindsey received tenure upon their hire as full professors. Robert McCarter was awarded the Ruth and Norman Moore Professorship, and Bruce Lindsey was awarded the E. Desmond Lee Professorship for Community Collaboration. Christof Jantzen was appointed the I-CARES Professor of Practice. Dr. Peter Raven, director emeritus of the Missouri Botanical Garden, was awarded a courtesy appointment in Landscape Architecture. Patty Heyda, Derek Hoeferlin, Seng Kuan, Natalie Yates, and Christine Yogiaman assumed tenure-track positions as assistant professors. Assistant Professor Jenny Lovell left the faculty this past spring to work in Hong Kong; Assistant Professor Jen Maigret left the faculty in 2009 to join the faculty at the University of Michigan; Jane Wolff left the faculty to take on the directorship of the landscape architecture program at the University of Toronto. Professors Jim Harris, Tom Thompson, and Carl Safe retired, and Jerry Sincoff stepped down as Dean upon the hire of Bruce Lindsey. Sadly, Assistant Professor Jacqueline Tatom passed away in fall 2006 due to complications from cancer.

Visiting Faculty

2006 (fall) - 2007 (spring)

Marcelo Ferraz São Paolo, Brazil — *Ruth and Norman Moore Visiting Professor*
Brian Healy Boston, MA — *Ruth and Norman Moore Visiting Professor*
Steve Luoni Fayetteville, AR — *Ruth and Norman Moore Visiting Professor*
Robert McCarter Gainesville, FL — *Ruth and Norman Moore Visiting Professor*

2007 (fall) - 2008 (spring)

Lawrence Scarpa Santa Monica, CA — *Ruth and Norman Moore Visiting Professor*
Mitchell Joachim Cambridge, MA **–** *Visiting Professor*
Rogers Marvel New York, NY – *Visiting Professors*

2008 (fall) - 2009 (spring)

Dennis Crompton London, England — *Ruth and Norman Moore Visiting Professor*
Karel Klein New York, NY — *Visiting Assistant Professor*
David Ruy New York, NY — *Ruth and Norman Moore Visiting Professor*
Sandy Marpillero New York, NY — *Visiting Assistant Professor*

2009 (fall) - 2010 (spring)

Wiel Arets the Netherlands — *Ruth and Norman Moore Visiting Professor*
Manuel Bailo and Rosa Rull Barcelona, Spain — *Ruth and Norman Moore Visiting Professors*
Andrew Bernheimer and Jared Della Valle New York, NY — *Visiting Professors*
Andrew Cruse Boston, MA — *Visiting Assistant Professor*
Ben Fehrmann Saint Louis, MO — *Visiting Assistant Professor*
Paul Lukez Somerville, MA — *Visiting Professor*
Marcelo Spina Los Angeles, CA — *Visiting Professor*
Kenneth Tracy New York, NY — *Visiting Assistant Professor*
Adam Yarinsky New York, NY — *Visiting Professor*
Christine Yogiaman New York, NY — *Visiting Assistant Professor*

2010 (fall) - 2011 (spring)

Mark Collins and Toru Hasegawa New York, NY – *Visiting Professors*
Brian Healy Boston, MA – *Ruth and Norman Moore Visiting Professor*
Heather Roberge Los Angeles, CA – *Visiting Professor*
Rocio Romero Saint Louis, MO – *Visiting Professor*
Wendell Burnette Phoenix, AZ – *Visiting Professor*
Ferda Kolatan New York, NY – *Visiting Professor*
Andrew Metter Chicago, IL – *Visiting Professor*
Alfredo Payá Benedito Alicante, Spain – *Ruth and Norman Moore Visiting Professor*
UrbanLab Chicago, IL – *Visiting Professors*

Lectures

2006 (spring) - 2007 (fall)
Architects

Michael Willis San Francisco, CA
Charles Rose Boston, MA
Lise Anne Couture New York, NY
Antoine Picon Cambridge, MA
Ben van Berkel Amsterdam, the Netherlands
Inaki Abalos Madrid, Spain
Rainer Mahlamäki Helsinki, Finland
Olafur Eliasson Berlin, Germany
William Valentine San Francisco, CA
Marcelo Ferraz São Paolo, Brazil
Robert McCarter Gainesville, FL
Julie Bargmann and Chris Fannin Charlottesville, VA
Edward Mazria Santa Fe, NM
Marcos Novak Santa Barbara, CA
Wendell Burnette Phoenix, AZ
Nigel Tonks London, England
Adele Chatfield-Taylor New York, NY | Rome
David Chiperfield London, England

Ann Hamilton Columbus, OH
Alex Wall Germany
Robert Rogers and Jonathon Marvel New York, NY
Douglas Garofolo Chicago, IL
Robert Ivy New York, NY
Steve Luoni Fayetteville, AR
Patrick Condon Vancouver, Canada
Eva Prats and Ricardo Flores Barcelona, Spain
Winy Maas Rotterdam, the Netherlands
Maya Lin New York, NY
James Wines New York, NY

Artists/Curators/Scholars
William Cronon Madison, WI
Brian Rea San Francisco, CA
Judy Pfaff Kingston, NY
Anna Gaskell New York, NY

2008 (fall) - 2009 (spring)
Architects
Mario Gooden New York, NY
James Carpenter New York, NY
Toshiko Mori New York, NY
Kenneth Frampton New York, NY
Dennis Crompton London, England
Tod Williams and Billie Tsien New York, NY
Lindy Roy New York, NY
David Dowell Kansas City, MO
Sandro Marpillero and Linda Pollak New York, NY
Stanley Saitowitz San Francisco, CA
James Polshek New York, NY
David Ruy and Karel Klein New York, NY
Brad Cloepfil Portland, OR
Lorcan O'Herlihy Los Angeles, CA
Paul Monaghan London, England
Marianne Burkhalter and Christian Sumi Zurich, Switzerland

Artists/Curators/Scholars
Jana Hawley Manhattan, KS
Elizabeth Armstrong Mpls, MN
Chris Duncan Oakland, CA
Terry Smith Pittsburgh, PA
Richard J. Jackson L.A., CA
Hillman Curtis New York, NY
Thomas Crow New York, NY
Saul Ostrow Cleveland, OH
Beverly Fishman Bloomfield Hills, MI
Yuko Shimizu New York, NY
W.J.T. Mitchell Chicago, IL
Brett Cook San Francisco, CA
Claudia Schmacke Berlin, Germany

2009 (fall) - 2010 (spring)
Architects
Ann Beha Boston, MA
Meejin Yoon Boston, MA
Wendell Burnette Phoenix, AZ
Adam Yarinsky New York, NY

Heinz Tesar Austria
Marcelo Spina Los Angeles, CA
William Massie Bloomfield Hills, MI
Stephen Duncombe New York, NY
Marlon Blackwell Fayetteville, AR
Alfonso Perez-Mendez Gainesville, FL
Jared Della Valle and Andrew Bernheimer New York, NY
Ada Karmi-Melamede Tel Aviv, Israel
Paula Lupkin St. Louis, MO
Wiel Arets Maastricht, Netherlands
Steven Holl New York, NY
Enrique Norten Mexico City, Mexico
Manuel Bailo Barcelona, Spain

Symposium
Making the Metropolitan Landscape Symposium
Eric Mumford St. Louis, MO
Charles Waldheim Cambridge, MA
Andrea Kahn New York, NY
Jane Wolff Toronto, Canada

Artists/Curators/Scholars
Jackie Brookner New York, NY
Roger Shimomura Seattle, WA
John Maeda Providence, RI
Yve-Alain Bois Princeton, NJ
Mel Chin North Carolina
Charlie Cannon Providence, Rhode Island
Allison Smith San Francisco, CA
George Baker Los Angeles, CA
Michael Bierut New York, NY
Ralph Rucci New York, NY
Suzanne Anker New York, NY
Karsten Harries New Haven, CT
Tobias Rehberger Frankfurt, Germany
Sam Weber and Jillian Tamaki New York, NY

2010 (fall) - 2011 (spring)
Architects
Julie Eizenberg Santa Monica, CA
Brian Healy Somerville, MA
Lawrence Scarpa Santa Monica, CA
Rocio Romero Perryville, MO
Yvonne Farrell Dublin, Ireland
Tom Leader Berkeley, CA
Thomas Phifer New York, NY
Jeanne Gang Chicago, IL
Milton Braga São Paolo, Brazil
Heather Roberge Los Angeles, CA
Francis Kéré Berlin, Germany
Ed Ford Charlottesville, VA
Alfredo Páya Alicante, Spain
Andrea Cochran San Francisco, CA
Pascal Quintard Hofstein Paris, France
Herman Hertzberger Amsterdam, the Netherlands
Rick Joy Phoenix, AZ
Rafael Moneo New York, NY
Michael Maltzan Los Angeles, CA

Mike Davis Los Angeles, CA
Fuensanto Nieto and Enrique Sobejano Madrid, Spain
Juhani Pallasmaa Helsinki, Finland
Andrew Metter Chicago, IL
Ferda Kolatan New York, NY
Urban Lab Chicago, IL
Kathryn Dean New York, NY

Artists/Curators/Scholars
Ann Hamilton Columbus, OH
John Rose Venice, CA
Stan Douglas Vancouver, BC
Victoria Vesna Los Angeles, CA
Phillip Pearlstein New York, NY
Monica Amor Baltimore, MD
Connie Butler Trinidad, CA
Patricia Olynyk St. Louis, MO
William Kentridge Johannesburg, South Africa

Select Public Exhibitions 2006-2011

Models and Prototypes
October 25, 2006 - December 31, 2006
Kemper Art Museum

Birth of the Cool: California Art, Design, and Culture at Mid-century
September 19, 2008 - January 5, 2009
Kemper Art Museum

Eero Saarinen: Shaping the Future
January 30, 2009 - April 27, 2009
Kemper Art Museum

On the Riverfront: St. Louis and the Gateway Arch
January 30 – March 9, 2009
Steinberg Gallery

Metabolic City
September 18, 2009 - January 4, 2010
Kemper Art Museum

Lost in Nature: The Architecture of Jarmund/Vigsnaes (Student Exhibition)
October 30 – November 29, 2009
Steinberg Gallery

Newly Drawn: Emerging Finnish Architects
October 2010
Givens Hall

Legally Blind/Universal Clarity (Student Exhibition)
November 2010
Givens Hall

Arch Grounds Design Concept Exhibition
February 2011
Givens Hall

Contemporary Nordic Architecture (Student Exhibition)
March 2011
Steinberg Hall

Organizing Voices (Student Exhibition)
March 2011
Givens Hall

Tomás Saraceno: Cloud-Specific
September 9, 2011 - January 9, 2012
Kemper Art Museum, Garen Gallery

I.2.1 Human Resources & Human Resource Development Faculty Credentials Matrix
Academic Year Fall 2010 / Spring 2011

Faculty	Qualifications	Course Number and Title	ARCH 317 / Core I	ARCH 318 / Core II	ARCH 419 / Core III	ARCH 511 / Advanced 1	ARCH 512 / Advanced 2	ARCH 611 / Advanced 3	ARCH 616 / Deg. Project	ARCH 323A / Arch. Rep. I	ARCH 323 B / Arch. Rep. II	ARCH 408A / Dig. Vis. I	ARCH 408 B / Dig. Vis. II	ARCH 408C / Dig. Vis. III	ARCH 339 / Con. & Princ.	ARCH 2284 / Arch. H. I	ARCH 4285 / Arch. H. II	ARCH 438 / Envi. Sys. I	ARCH 449 / Envi. Sys. II	ARCH 447A / Struct. I	ARCH 447B / Struct. II	ARCH 346 / Build. Syst. I	ARCH 538C / Adv. Build. Syst.	ARCH 580 / Des. Think.	ARCH 646 / Pro. Pract.	ARCH 421P / Marina City	ARCH 464A / Arch. & Phot.	ARCH 471A Contin. & Transfor.	ARCH 484C / Metabolic City	ARCH 522C / Coll. Form	ARCH 527D / Kahn & Aalto	ARCH 527G / Lina Bo Bardi	ARCH 527N / Nordic Arch.	ARCH 528M / Arch. Assoc.	ARCH 528P / Crit. Reg. Pract.	ARCH 565C / Arch. Phot. Film	ARCH 562G / Mapping	ARCH 567C / Crit. Glob. Pract.	ARCH 570 / Hist. Land. Arch.	ARCH 575 / Paint. Into Arch.	ARCH 4782 / Mod. Arch. STL	ARCH 454 / Public Space	ARCH 455A / Urban Books	ARCH 47A Cont. & Trans.	ARCH 525K / LandArchUrb	ARCH 562H / Met. Develop.	ARCH 564A / Urban Dev.	ARCH 564J / Sustainibility	ARCH 654D / Met. Land.	ARCH 656 / Met. Urbanism	ARCH 657 / Pract. Sust. Urb.
			Required Design Studios							Required Courses																History Theory Electives														Required Electives: Urban Issues								
Andrew Cruse	AIA, NCARB, LEED AP, M. Arch-Rice, Fulbright Fellow,10 years practice-Machado and Silvetti, reg. architect + 3 years teaching exp.				X				X										X																						X						
Gia Daskalakis	Post Professional Theory degree-ETSAB, research and publications on the city + 25 years teaching ex																																															
Kathryn Dean	AIA, FAAR, Partner - award winning and highly published practice + 17 years teaching at Columbia Univ., GSD, UVa, UMich, UF					X	X	X	X																																							
Paul Donnelly	FAIA, ASCE, AEI, USGBC, Partner-HOK, dual trained architect and engineer with well published research on energy and the environment, former .co-director-graduate program + 25 years teaching exp					X	X	X																X																							
Ben Fehrmann	Numerous AIA Awards from 13 years Professional Practice + 4 years teaching exp.				X																				X																							
Ian Fraser	Published research on drawing, architectural and urban typology, exhibiting sculptor + 35 years teaching exp																								X				X															X				
Catalina Freixas	Published research on Biomimicry, 10 years of professional practice + 9 years teaching exp.		X			X	X	X																																								
Carolyn Gaidis	MLA - U Penn, 15 years practice exp + 3 years teaching exp																																															X		
Patricia Heyda	ULI, LEED AP, M. Arch w/Distinction - GSD, 10 years professional practice +10 years teaching exp					X	X	X																	X																						X		X	
John Hoal	Phd, MArch, MUD, IUD Fellow, Award winning private practice, Published research in urban sustainability + 20 years teaching exp																																														X			X	
Derek Hoeferlin	NCARB, 15 years professional practice, Research and publications on water and the city + 6 years teaching exp				X	X	X	X		X															X																										
Eric Hoffman	AIA, NCARB, LEED, M Arch. WU, 10 years practice collaboration w/Jean Nouvel, David Chipperfield + 7 years teaching exp.					X	X	X	X																																								
Phil Holden	AIA, NCARB, Award winning private practice, 32 years professional exp + 13 years teaching exp					X	X	X	X																X																									
Dorothèe Imbert	Phd, MArch, MLA, former Asst Chair, Landscape - GSD, Published author, 10 years professional exp + 11 years teaching exp																																																
Christof Jantzen	AIA, LEED AP, Partner Behnisch Architecten LA, designer LEED Platinum Genzyme Center, 17 years professional exp.					X	X	X																																									
George Johanne	AIA, 37 years professional experience + 15 years teaching exp																								X																								
Sung Ho Kim	B.Arch RISD, advanced degrees-AA + MIT, partner award winning and published practice + 12 years teaching exp		X			X	X	X	X			X	X	X											X																								
Don Koster	MArch, LEED AP, Community Based Grants, 10 years practice + 8 years teaching exp				X	X	X	X		X																																							
Stephen Leet	Practicing Architect, Research and Publications in history/theory + 23 years teaching exp				X	X	X	X																			X									X													

I.2.1 Human Resources & Human Resource Development Faculty Credentials Matrix
Academic Year Fall 2010 / Spring 2011

Faculty	Qualifications	Course Number and Title	ARCH 317 / Core I	ARCH 318 / Core II	ARCH 419 / Core III	ARCH 511 / Advanced 1	ARCH 512 / Advanced 2	ARCH 611 / Advanced 3	ARCH 616 / Deg. Project	ARCH 323A / Arch. Rep. I	ARCH 323 B / Arch. Rep. II	ARCH 408A / Dig. Vis. I	ARCH 408 B / Dig. Vis. II	ARCH 408C / Dig. Vis. III	ARCH 339 / Con. & Princ.	ARCH 2284 / Arch. H. I	ARCH 4285 / Arch. H. II	ARCH 438 / Envi. Sys. I	ARCH 449 / Envi. Sys. II	ARCH 447A / Struct. I	ARCH 447B / Struct. II	ARCH 346 / Build. Syst. I	ARCH 538C / Adv. Build. Syst.	ARCH 580 / Des. Think.	ARCH 646 / Pro. Pract.	ARCH 421P / Marina City	ARCH 464A / Arch. & Phot.	ARCH 471A Contin. & Trans.	ARCH 484C / Metabolic City	ARCH 522C / Coll. Form	ARCH 527D / Kahn & Aalto	ARCH 527G / Lina Bo Bardi	ARCH 527N / Nordic Arch.	ARCH 528M / Arch. Assoc.	ARCH 528P / Crit. Reg. Pract.	ARCH 565C / Arch, Phot. Film	ARCH 562G / Mapping	ARCH 567C / Crit. Glob. Pract	ARCH 570 / Hist. Land. Arch.	ARCH 575 / Paint. Into Arch.	ARCH 4782 / Mod. Arch. STL	ARCH 454 / Public Space	ARCH 455A / Urban Books	ARCH 47A Cont. & Trans.	ARCH 525K / LandArchUrb	ARCH 562H / Met. Develop.	ARCH 564A / Urban Dev.	ARCH 564J / Sustainibility	ARCH 654D / Met. Land.	ARCH 656 / Met. Urbanism	ARCH 657 / Pract. Sust. Urb.
			Required Design Studios							Required Courses																History Theory Electives														Required Electives: Urban Issues								
Zeuler Lima	Post Doc Fellow - Columbia, Phd MS Arch and Urbanism, - Univ. of Sao Paulo, 10 Published research on Lina Bo Bardi, 10 years professional practice + 22 years teaching exp					x	x	x																							x									x							
Bruce Lindsey	AIA, ASLA, USGBC, MArch - Yale, former Head of Architecture at Auburn University, Professional exp + 23 years teaching exp																																															
Jenny Lovell	RIBA, Research and publications on Building Envelopes, 9 years professional exp. + 10 years teaching exp				x				x										x																													
Adrian Luchini	AIA, SCA, Award winning and published practicing architect, forner co-director-graduate program + 25 years teaching exp					x	x	x	x															x																								
Peter MacKeith	ACSA Award Creative Achievement in Design Education, Research and publication on Contemporary Nordic and Finnish Architecture					x	x	x							x															x		x															
Igor Marjanovic	Published research on Marina City and Design Education, 15 years professional experience + 11 years teaching experience			x																						x																					
Robert McCarter	Published author of numerous architectural books,"Top Ten Educator in US", former Chair - Univ. of Florida, + 25 years teaching exp					x	x	x																										x			x		x							
Pablo Moyano	MArch, MUD, LEED, 8 years practice + 6 years teaching exp				x	x	x	x																	x																						
Eric Mumford	Phd - Princeton, MArch - MIT, Well respected and published author of significant histories of architecture and urban design, 7 years professional exp + 15 years teaching exp																x																														
Elysse Newman	Phd, MPhil, MArch - GSD, Published research, practicing architect + teaching exp									x					x	x																					x										
James Scott	ACCI - Fellow, Lawyer practicing construction law, published research on Construction and Contracts																								x																						
Phil Shinn	Structural Engineer with 32 years experience + 24 years teaching exp																			x	x																										
Ken Tracy	Former partner Associated Fabrication, MArch - Columbia, Published design research +2 years teaching exp					x	x	x																x													x										
Heather Woofter	MArch - GSD, partner in award winning and published practice + 11 years teaching exp			x		x	x	x	x																				x																		
Christine Yogiaman	MArch - Columbia, 6 years professional experience, published design research + 2 years teaching experience		x	x						x	x																																				

I.2.1 Human Resources & Human Resource Development Faculty Credentials Matrix
Academic Year Fall 2009 / Spring 2010

Faculty	Qualifications	Course Number and Title	ARCH 317 / Core I	ARCH 318 / Core II	ARCH 419 / Core III	ARCH 511 / Advanced 1	ARCH 512 / Advanced 2	ARCH 611 / Advanced 3	ARCH 616 / Deg. Project	ARCH 323A / Arch. Rep. I	ARCH 323 B / Arch. Rep. II	ARCH 408A / Dig. Vis. I	ARCH 408 B / Dig. Vis. II	ARCH 409C / Dig. Vis. III	ARCH 339 / Con. & Princ.	ARCH 2284 / Arch. H. I	ARCH 4285 / Arch. H. II	ARCH 544 / Acoust. & Light.	ARCH 546C / Clim. & Light.	ARCH 552B / Site Planning	ARCH 447A / Struct. I	ARCH 447B / Struct. II	ARCH 346 / Build. Syst. I	ARCH 538B / Build. Syst. II	ARCH 580 / Des. Think.	ARCH 646 / Pro. Pract.	ARCH 421P / Marina City	ARCH 464A / Arch. & Phot.	ARCH 471A Contin. & Transfor.	ARCH 484C / Metabolic City	ARCH 522C / Coll. Form	ARCH 528M / Arch. Assoc.	ARCH 528P / Crit. Reg. Pract.	ARCH 565C / Arch. Phot. Film	ARCH 562G / Mapping	ARCH 567C / Crit. Glob. Pract.	ARCH 4782 / Mod. Arch. STL	ARCH 47A Cont. & Trans.	ARCH 525K / LandArchUrb	ARCH 562H / Met. Develop.	ARCH 564A / Urban Dev.	ARCH 564J / Sustainability	ARCH 654D / Met. Land.	ARCH 656 / Met. Urbanism	ARCH 657 / Pract. Sust. Urb.
			Required Design Studios							Required Courses																	History Theory Electives																	
Andrew Cruse	AIA, NCARB, LEED AP, M. Arch-Rice, Fulbright Fellow,10 years practice-Machado and Silvetti, reg. architect + 3 years teaching exp.								X																																		
Randy Burkett	FIALD, IESNA, LC, +30 years practice-Randy Burkett Lighting Design																	X																										
Gia Daskalakis	Post Professional Theory degree-ETSAB, research and publications on the city + 25 years teaching ex																																				X						
Kathryn Dean	AIA, FAAR, Partner - award winning and highly published practice + 17 years teaching at Columbia Univ., GSD, UVa, UMich, UF					X																																				
Paul Donnelly	FAIA, ASCE, AEI, USGBC, Partner-HOK, dual trained architect and engineer with well published research on energy and the environment, former .co-director-graduate program + 25 years teaching exp					X	X	X	X																X																		
Ben Fehrmann	Numerous AIA Awards from 13 years Professional Practice + 4 years teaching exp.				X																																						
Ian Fraser	Published research on drawing, architectural and urban typology, exhibiting sculptor + 35 years teaching exp																												X								X						
Catalina Freixas	Published research on Biomimicry, 10 years of professional practice + 9 years teaching exp.		X																																								
Carolyn Gaidis	MLA - U Penn, 15 years practice exp + 3 years teaching exp																			X																					X			
Patricia Heyda	ULI, LEED AP, M. Arch w/Distinction - GSD, 10 years professional practice +10 years teaching exp																								X														X				
Eric Hoffman	AIA, NCARB, LEED, M Arch. WU, 10 years practice collaboration w/Jean Nouvel, David Chipperfield + 7 years teaching exp.					X	X	X																X																			
Derek Hoeferlin	NCARB, 15 years professional practice, Research and publications on water and the city + 6 years teaching exp				X			X		X																																	
Phil Holden	AIA, NCARB, Award winning private practice, 32 years professional exp + 13 years teaching exp								X																																		
Christof Jantzen	AIA, LEED AP, Partner Behnisch Architecten LA, designer LEED Platinum Genzyme Center, 17 years professional exp.					X	X	X																																		
George Johanne	AIA, 37 years professional experience + 15 years teaching exp								X																	X																		
Sung Ho Kim	B.Arch RISD, advanced degrees-AA + MIT, partner award winning and published practice + 12 years teaching exp		X	X		X		X																	X																		
Don Koster	MArch, LEED AP, Community Based Grants, 10 years practice + 8 years teaching exp				X	X		X																																			
Stephen Leet	Practicing Architect, Research and Publications in history/theory + 23 years teaching exp				X				X																				X						X								

I.2.1 Human Resources & Human Resource Development Faculty Credentials Matrix
Academic Year Fall 2009 / Spring 2010

Faculty	Qualifications	Course Number and Title	ARCH 317 / Core I	ARCH 318 / Core II	ARCH 419 / Core III	ARCH 511 / Advanced 1	ARCH 512 / Advanced 2	ARCH 611 / Advanced 3	ARCH 616 / Deg. Project	ARCH 323A / Arch. Rep. I	ARCH 323 B / Arch. Rep. II	ARCH 408A / Dig. Vis. I	ARCH 408 B / Dig. Vis. II	ARCH 408C / Dig. Vis. III	ARCH 339 / Con. & Princ.	ARCH 2284 / Arch. H. I	ARCH 4285 / Arch. H. II	ARCH 544 / Acousti. & Light.	ARCH 546C / Clim. & Light.	ARCH 552B / Site Planning	ARCH 447A / Struct. I	ARCH 447B / Struct. II	ARCH 346 / Build. Syst. I	ARCH 538C / Building. Sysy. II	ARCH 580 / Des. Think.	ARCH 646 / Pro. Pract.	ARCH 421P / Marina City	ARCH 464A / Arch. & Phot.	ARCH 471A Contin. & Trans.	ARCH 484C / Metabolic City	ARCH 522C / Coll. Form	ARCH 528M / Arch. Assoc.	ARCH 528P / Crit. Reg. Pract.	ARCH 565C / Arch. Phot. Film	ARCH 562G / Mapping	ARCH 567C / Crit. Glob. Pract.	ARCH 4782 / Mod. Arch. STL	ARCH 47A Cont. & Trans.	ARCH 525K / LandArchUrb	ARCH 562H / Met. Develop.	ARCH 564A / Urban Dev.	ARCH 564J / Sustainability	ARCH 654D / Met. Land.	ARCH 656 / Met. Urbanism	ARCH 657 / Pract. Sust. Urb.
			Required Design Studios							Required Courses																	History Theory Electives										Urban Issues Electives							
Bruce Lindsey	AIA, ASLA, USGBC, MArch - Yale, former Head of Architecture at Auburn University, Professional exp + 23 years teaching exp																																										
Jenny Lovell	RIBA, Research and publications on Building Envelopes, 9 years professional exp. + 10 years teaching exp				x				x																x																		
Adrian Luchini	AIA, SCA, Award winning and published practicing architect, former co-director-graduate program + 25 years teaching exp					x	x	x																	x																		
Peter MacKeith	ACSA Award Creative Achievement in Design Education, Research and publication on Contemporary Nordic and Finnish Architecture					x	x	x							x																												
Igor Marjanovic	Published research on Marina City and Design Education, 15 years professional experience + 11 years teaching experience			x																							x					x										
Robert McCarter	Published author of numerous architectural books,"Top Ten Educator in US", former Chair - Univ. of Florida, + 25 years teaching exp					x	x	x																									x			x						
Pablo Moyano	MArch, MUD, LEED, 8 years practice + 6 years teaching exp				x	x	x	x												x																							
Eric Mumford	Phd - Princeton, MArch - MIT, Well respected and published author of significant histories of architecture and urban design, 7 years professional exp + 15 years teaching exp															x															x					x					x	
Elysse Newman	Phd, MPhil, MArch - GSD, Published research, practicing architect + teaching exp														x													x							x								
Michael Repovich	BArch - Kansas State with significant experience in professional practice. Now Principal of his own practice, ARO. Particular research interests in sustainability and energy efficient design.																		x																							
James Scott	ACCI - Fellow, Lawyer practicing construction law, published research on Construction and Contracts																									x																
Phil Shinn	Structural Engineer with 32 years experience + 24 years teaching exp																				x	x																				
Ken Tracy	Former partner Associated Fabrication, MArch - Columbia, Published design research +2 years teaching exp				x																																					
Lilly Wang	Ph.D. in Acoustics from the Graduate Program in Acoustics at Pennsylvania State University, B.S.E. degree in Civil Engineering with a certificate in Architecture from Princeton University.																	x																								
Heather Woofter	MArch - GSD, partner in award winning and published practice + 11 years teaching exp			x		x		x																																		
Christine Yogiaman	MArch - Columbia, 6 years professional experience, published design research + 2 years teaching experience		x	x						x																																

I.2.1 HUMAN RESOURCES AND HUMAN RESOURCE DEVELOPMENT, STUDENTS

Student Application Evaluation

Sam Fox School Associate Dean and Associate Professor Peter MacKeith directs graduate admissions with assistance from Graduate Coordinator Kathleen O'Donnell. MacKeith and O'Donnell are the first to review student applications, including a transcript, portfolio, reference letters, and personal statement. Applications are then reviewed by a minimum of three (most typically five) faculty who serve with others on the Graduate Admissions Committee. Faculty review and evaluate assigned applications and provide a score for each assigned applicant. In a meeting of the Graduate Admissions Committee, led by Associate Dean MacKeith, applications are reviewed and discussed, ranked, and then approved for admission, waitlisted, or declined. 2011 year was the first year that a wait list was employed. The Dean of Architecture, Director of Graduate Programs, and the chairs of Architecture, Landscape Architecture, and Urban Design serve as ex officio members to the Admissions Committee and participate in the meeting. The Graduate Financial Aid Committee, chaired by the Dean of Architecture, then reviews accepted applicants for scholarship awards. Acceptance letters are prepared and mailed under the direction of Professor MacKeith by Kathleen O'Donnell. See also Part II, Section 3.

Student Support Services

Graduate students are assigned a faculty adviser upon admittance to the program. Advisers are full-time faculty and meet regularly with their advisees, especially in the two-week period before course registration and, for incoming students, the day before the first day of class. Faculty have between 20-25 student advisees on average; dual degree students are supported with specific advisers to cover each area of concentration. The faculty advisers work closely with the program chairs who coordinate advising activity along with the Director of the Graduate School and the Architecture Registrar. Students have access to online course listings and engage in ongoing communication with the Registrar who is responsible for maintaining student records and degree checklists and for reviewing each student's progress towards graduation. The Registrar is responsible for verifying students' successful completion of degree requirements and participation in commencement. The Office of the University Registrar is responsible for maintaining student ID cards and enrollment records at the University level.

For the last six years, all incoming Architecture graduate students have participated in an extensive orientation. For the last three years, this orientation has been two weeks long, immediately preceding the first day of classes. The orientation introduces students to the University context, its administration, and the local environment of St. Louis. It also introduces students to the support and advising services of the Graduate School and its physical facilities, including a shop orientation and overviews of instructional technology services, digital fabrication capabilities, and studio policies and expectations. The Graduate Architecture Council is actively involved in helping students to become familiar with the School, its resources and services, all while promoting social interaction between students, faculty, and staff. This year all MArch 3 graduate Architecture students, including Urban Design and Landscape Architecture students, attended a two-day off-site camping trip to the Shaw Nature Reserve. Activities such as sketching sessions and guided hikes gave students insight into the prairie ecology of the Midwest.

Associate Dean and Associate Professor Peter MacKeith serves as the Sam Fox School ombudsman and works with students in relation to issues of academic integrity and harassment.

For international students, several programs are available for English language support, including the English Language Program (EPL) and the Writing Center, which offers free writing guidance to all Washington University students. The Graduate School requires all new M.Arch students from foreign countries to take a one-credit language course in their first semester that has been especially tailored to the needs of Architecture students.

The Disability Resource Center provides support for students on an individual basis, including readers to assist visually impaired students, oral or sign language interpreters for hearing-impaired students, note-takers, tutors, special equipment, and assistance in obtaining audio taped textbooks. The University Counseling Service, which is part of Student Health Services, works with students to resolve personal and interpersonal difficulties through individual, group, and couples counseling. The Sam Fox School Associate Deans work with University Counseling as liaisons.

Graduate School of Architecture & Urban Design students have access to all Washington University facilities, including the Athletic Complex and outdoor practice fields, all libraries on campus, and the various lounges and dining facilities. Most graduate students find their own off-campus housing, either through the Apartment Referral Services or on their own. There are many secure, well-maintained apartment buildings within a two- to three-mile radius of campus with reasonable rents, many of them accessible both to mass transit and to the University's free shuttle bus service. In the past ten years, the University has purchased over 1,200 apartments and other housing units in adjacent neighborhoods; the University both manages and provides security to these areas.

Students receive support for internships, job placement, and job skills training through the University's Career Center and the resident Career Services Specialist. As described earlier, the Career Services Specialist leads workshops in resume writing, portfolio development, and interview skills and leads panel discussions with local professionals and faculty to assist students towards their career goals. The Career Services Specialist also leads road trips for students to visit offices in New York and Chicago to meet firm principals, participate in mock interviews, and better understand the employment and internship landscape. The School also has the support of a Business Development Specialist from the Career Center. The Business Development Specialist is responsible for all professional contacts and relationships and administers the new Design Internship Network (DIN), which is aimed at increasing the opportunity for internships for our graduate students. Career Services staff organize the yearly Architecture and Design Career Fair which hosts national and local professional representatives for a day-long on- campus interview and information program. Students also participate in the University-wide Internship and Job Career Fair held each fall.

The Graduate School's Internship Development Coordinator, Senior Lecturer Don Koster, AIA, works closely with the Career Center and Professor George Johannes, who teaches the required graduate course in professional practice, to ensure students are informed about IDP requirements and procedures. Koster regularly attends the national IDP Coordinators conference.

Participation on Field Trips and Off-Campus Activities

Students participate in a variety of field trips and off-campus activities. Graduate student Travel Grants are awarded through the Sam Fox School twice each year. These grants support student travel in relation to professional and academic development. Recent examples of travel grant awards include the following:

Deepti Adlakha, MUD, traveled to India to study the latest initiatives for design activism, sustainability, and entrepreneurship.

Linda Levin, M Arch, traveled to Milwaukee for a workshop to learn about composting, vermiculture, and community development through urban agriculture with the purpose of maintaining an urban garden.

Samantha Stein, M Arch, traveled throughout the central United States to study the spatial experiences of successful aquaria and to meet with aquarium directors, engineers, and planners.

Field trips are part of the core 319 studio during which students visit one of three sites relating to different climate conditions as context for the studio project. Option studios often have a travel component. Travel is not required, but is popular as a significant learning opportunity related to studio offerings. Travel sites in the last few years have included Antigua, Venice, Rome, Sao Paolo, Los Angeles, Chicago, New York City, Dallas-Fort Worth, Boston, Nanjing, the Netherlands, Copenhagen, and Florence, among others. Students may apply for financial travel assistance through the Office of the Sam Fox School Assistant Dean for Finance. In addition, the Dean of Architecture supports student travel related to other academic and professional activity through a proposal review process. Support has allowed students to participate in national conferences and national and international competitions, such as the National Organization of Minority Architects national conference, the national AIA convention, the Chase Community Development Competition, the Mayors Institute on City Design, the ULI competition, and the national AIAS convention.

Seminar courses routinely use field trips to contribute to student learning. Recent examples include visits to early modern works of architecture in the Mid-Century Modern Architecture course taught last spring, field trips to Cahokia Mounds as part of the architectural history course, to Fort Worth, Philadelphia, and Exeter as part of a Louis Kahn seminar and to the Nordic countries as part of that seminar, and extensive tours of St. Louis as part of the Design Thinking course in preparation for the Degree Project. This travel is funded through the Dean of Architecture's office.

Support for Professional Organizations, Student Organizations, and Honorary Societies

Graduate Architecture students are active in the Graduate Architecture Council (GAC), which is a primary liaison organization between students, faculty, and the administration. Two years ago, the Washington University AIAS chapter was disbanded in favor of strengthening the undergraduate student organization, the Architecture School Council (ASC), and the GAC and their interrelationship. This was a student-led initiative that has indeed strengthened both organizations. In addition, graduate Architecture students participate in Green Givens, a student organization comprised of both undergraduate and graduate students interested in promoting sustainability and sustainable practices both within coursework and in the day-to-day practices of the School. In fall 2009, the Washington University chapter of the National Organization of Minority Architecture Students (NOMAS) was reestablished with the leadership of faculty member and alumus Charles Brown, who serves as the faculty adviser to the chapter. The student chapter shares a close relationship to the local NOMA professional chapter. NOMAS has been active particularly in relation to the national competition organized as part of the national convention. In 2009, Washington University's student NOMAS team placed third in that competition, and students will be attending the convention in Atlanta this fall where they will submit their entry to this year's competition.

Last year, due mainly to a group of committed undergraduate students, a Washington University chapter was established for Alpha Rho Chi, the national fraternity for architecture and the allied arts. Membership is growing and student leaders are committed to the development of a vibrant student organization promoting mentoring,

networking, and service activities for all students. Last spring, initial efforts began in the formation of a student chapter of the American Society of Landscape Architects.

Student Research, Scholarship, and Creative Activity

The Graduate School promotes student research, scholarship, and creative activity through a number of efforts, not the least of which is student engagement in faculty research through research assistantships, teaching assistantships, competitions, and exhibitions described by selected examples:

The Laskey Prize juried competition, open to both undergraduate and graduate students, is offered every year in honor of professor emeritus Leslie Laskey. Graduate student teams have been successful three of the four years that the $5,000 prize has been offered. Projects include the Laskey Landscape construction on the Sam Fox School campus designed and built by graduate students Roberto Deseda and Justin Beadle, a bench and information system on the Gateway Mall in downtown St. Louis designed and built by Akshita Sivakumar and Stephen Kim, and a recently completed outdoor furniture installation in the University's Butterfly Garden by Lavender Tessmer and Andrea Fisk.

Individual student research and creative activity is routinely facilitated through independent faculty-supervised study. These student-directed efforts range from one to three credits. Independent studies have included advanced freehand drawing advised by Associate Professor Hansman, *Emergence in Architecture* advised by Dean Lindsey, research in advanced building systems advised by Professor Donnelly, and research in advanced modeling and fabrication advised by Associate Professor Kim, among others.

Graduate Architecture student Lindsay Nencheck, with financial support from the Dean of Architecture and with faculty adviser Zeuler Lima, won the 2011 Milka Bliznakov Prize given by the International Archives of Women in Architecture. The annual prize provides financial support for research on women in architecture and related design fields. Nencheck researched the 1974 Symposium of Women in Architecture, held at Washington University and organized by 14 female graduate and undergraduate students. In spring 2011, Nencheck and graduate Architecture student Shin Park designed a Givens Hall exhibition highlighting the symposium. This fall, Nencheck will extend that line of inquiry, traveling to Virginia Tech to do research at the IAWA archives. Her work will culminate in a presentation and final research paper.

The Steedman Summer Travel Fellowship competition is a $5,000 annual award for travel open to advanced undergraduate and graduate students, supported since 1984 through the Steedman endowment. A faculty committee reviews proposals for travel, and recent winners have included graduate student June Kim who traveled to Cambodia to study the floating settlements of the Mekong River Delta and, most recently, Josh Canez for his proposal to research the construction techniques of ten schools in Haiti. As part of the award requirements, students are asked to mount an exhibition in Givens Hall sharing findings from their travels.

As the research culture at the Graduate School expands, students have increasingly participated in faculty research. Graduate Architecture students Sujaul Khan and Christian Clerc participated as research assistants with Professor Donnelly on his research into the application of phase change materials in building enclosure systems. This work has been supported through a grant to Professor Donnelly from MAGEEP, the McDonnell Academy Global Energy and Environment Partnership. In 2008, Christian attended the second International Symposium on Energy and Environment in Hong Kong with Professor Donnelly to present findings from this research. In 2007, Professor Donnelly was awarded an NCARB prize for his program Practice Based Research in the Academy, which featured work with students on cutting-edge topics of advanced

building systems research. A regularly offered seminar titled Technology Transfer taught by Professor Donnelly has become a popular starting point for students interested in research.

Graduate students Aaron Plewke and Meredith Kline, with Architecture faculty member Christof Jantzen, continued work by undergraduate students John Mayer and Daniel Dugoff on design development for a new teaching center for the Crossroads College Preparatory School in the nearby St. Louis neighborhood of Skinker DeBaliviere. Work on this project will continue with graduate students this year under Professor Jantzen's supervision.

Graduate and undergraduate students have been active in the development of the Materials Research Center over the last four years. Led by faculty members Liane Hancock and Hannah Roth, students have executed extensive research on sustainable materials, material classification, and material certification. Students have developed case studies that use new materials in innovative ways, completed research on a materials database, and organized material samples in the MRC library. Students participated in planning and research for a sustainable materials classification and certification symposium held last spring in Washington, D.C., in partnership with the Law School and the Brookings Institution. The symposium was funded by the Academic Venture Fund, a seed funding partnership between Washington University and the Brookings Institution.

The recent approval by the faculty of the Master of Science in Architectural Studies degree is intended to increase student access to research opportunities past their first professional degree. This will be a highly individualized course of study intended to advance the student's disciplinary depth in a specific area as well as connect student research to faculty research in a productive way.

I.2.2 ADMINISTRATIVE STRUCTURE AND GOVERNANCE

University Accreditation

Washington University in St. Louis is accredited by the North Central Association of Colleges and Universities. There are seven Schools within the University, including the Sam Fox School of Design & Visual Arts, which houses the College of Architecture and the Graduate School of Architecture & Urban Design. The deans of each school report to the Provost, the chief academic officer of the University, who reports to the Chancellor. The Chancellor is appointed by the Board of Trustees.

Sam Fox School of Design and Visual Arts
Administrative Structure

The Sam Fox School of Design & Visual Arts was formed on July 1, 2006, as a new academic and fiscal unit within the University. The Sam Fox School includes the College of Architecture (undergraduate), the Graduate School of Architecture & Urban Design, the College of Art (undergraduate), the Graduate School of Art, and the Mildred Lane Kemper Art Museum. The School also includes an administrative structure that leverages shared staffing and resources across the academic units and the Museum.

The Dean of the Sam Fox School serves as the School's chief academic and administrative officer. The Deans of Architecture and Art serve as the academic and administrative officers of their respective units. The director serves as the administrative officer of the Mildred Lane Kemper Art Museum. The Deans of Art and Architecture and the Museum director report to the Dean of the Sam Fox School.

The Dean of the Sam Fox School manages the School in consultation with a senior leadership team including the Deans of Art and Architecture, the director of the Museum, and senior Sam Fox School administrative staff members:

Associate Dean is a twelve-month administrative and faculty position. The Associate Dean has the following administrative responsibilities: graduate recruitment, graduate admissions, public programming coordination, curricular coordination and interdisciplinary initiatives, IT staff and resources administration, and service as the School ombudsman. The Associate Dean of the Sam Fox School is responsible for the organization of recruiting visits, the admissions process, portfolio review and acceptance decisions, and scholarship review and decisions for the Graduate School of Architecture & Urban Design.

Associate Dean of Students (undergraduate) is a twelve-month administrative appointment with the following responsibilities: student advising oversight, student support and support staff supervision, and undergraduate recruitment.

Assistant Dean for Finance is a twelve-month administrative appointment with the following responsibilities: budget management and planning, graduate financial aid management**,** student enrollment planning and projections, hiring and employment administration for faculty, staff, and students, and financial support staff supervision.

Registrar of Architecture, Registrar of Art are twelve-month appointments with the following responsibilities: course registration and student records management, tracking of degree requirements, and commencement administration.

Director of Communications is a twelve-month administrative appointment with the following responsibilities: Sam Fox School, Art, and Architecture communications oversight, web site development and management, and University communications liaison.

Director, Sam Fox School Research Office is a twelve-moth administrative and faculty appointment with the following responsibilities: faculty research support, funding opportunities research, and grant administration support.

The School receives additional support from the University for specialized staff resources, including a dedicated team of four Sam Fox School Alumni and Development staff members and three Career Services staff members.

Sam Fox School
Management and Governance

The approach to management within the Sam Fox School encourages the implementation of best practices across the academic units and the Museum. At the top-most level, this is accomplished in bi-weekly Deans' meetings between the Sam Fox Dean and the Deans of Art and Architecture. These meetings address high-level administrative, personnel, financial, pedagogical, and curricular issues that cross academic disciplines. A Dean's Cabinet, including the Deans, the Museum director, and senior-level Sam Fox School administrative staff, meets monthly to discuss School-wide issues ranging from programmatic initiatives to policy review. Sam Fox School tenured and tenure-track faculty meetings are forums for School-wide curriculum and policy review and votes, while all-School staff and faculty meetings, usually scheduled twice per semester, offer general updates and opportunities for broad discussion of School issues.

Tenure, promotion, and hiring is governed by the "Policy on Faculty Appointment, Retention, Tenure, and Promotion" that standardizes practices across Art and

Architecture. Search practices are defined in detail in the policy to ensure that a diverse range of highly qualified candidates is engaged in the process. Searches are managed by discipline, but search practices require that one Art faculty member sit on Architecture searches and vice versa. Tenure and Promotion votes are also managed by discipline, and votes for tenure and promotion by the tenured faculty are recorded and reported to the Dean of Art or the Dean of Architecture, who makes a recommendation regarding candidates to the Sam Fox School Tenure and Promotion Committee. The Dean of the Sam Fox School presents candidates who receive positive votes for tenure and/or promotion from the Sam Fox School Tenure and Promotion Committee to the University's Board of Trustees for a final vote.

Sam Fox School Committees

Dean's Faculty Advisory Committee is composed of seven tenured faculty members from the Colleges of Art and Architecture (alternating 3-4 split between Art and Architecture faculty.) They serve to support and advise the Sam Fox School Dean on faculty governance policies, short- and long-range strategic planning, and academic matters and significant issues that have a direct impact on the School's primary mission in the areas of teaching, research, and service. The Deans of Art and Architecture serve as ex-officio members.

Dean's Advisory Committee on Tenure and Promotion reviews and advises the Dean of the Sam Fox School on recommendations from each College for the award of tenure, for promotion to the ranks of associate professor and full professor, and for new appointments that carry tenure. The committee consists of three tenured full professors from Architecture, three tenured full professors from Art, and one tenured full professor from the Department of Art History and Archaeology (outside the Sam Fox School).

Sam Fox School Exhibitions Committee reviews proposals and determines the program for exhibitions in the Garen Gallery. The committee includes the Director of the Mildred Lane Kemper Art Museum, the Dean of Art, the Dean of Architecture, and one faculty representative each from Art and Architecture. The Dean of the Sam Fox School serves as an ex officio member.

Public Lecture Committee develops, plans, and coordinates the Public Lecture Series for the Sam Fox School. The committee is chaired by the Associate Dean and includes one faculty member each from Art and Architecture (each appointed by the college dean), the Coordinator of Education and Public Programs (Museum), a liaison from Island Press, and four student members.

Committee for Policies, Fairness, and Diversity advises the Sam Fox School Dean's office on issues related to fairness and diversity including the improvement of recruitment and retention efforts, strengthening the environment for women and members of minority groups, and stimulating and responding to opportunities that promote and encourage diversity, tolerance, and equity among all groups of faculty in the Sam Fox School. The committee includes five members representing both Art and Architecture faculty.

Ad Hoc Sam Fox School Curriculum Committee is convened as needed to develop shared undergraduate curriculum and new degree structures. These committees include equal Architecture and Art faculty representation as well as the College Deans, the Architecture Undergraduate Program Administrator, and the Associate Dean of Students.

College and Graduate School of Architecture and Urban Design
Administrative Structure

Dean of Architecture: The Dean of the College of Architecture and Graduate School of Architecture & Urban Design, a full-time, five-year appointment, is appointed by the Dean of the Sam Fox School and is responsible for all aspects of the administration of the undergraduate and graduate programs in Architecture, Landscape Architecture, and Urban Design—hereafter referred to as the Dean of Architecture. The Dean of Architecture is responsible for implementing the strategic plan, ensuring the quality and relevancy of the degree programs, and maintaining a productive and creative environment for students, faculty, and staff. The Dean of Architecture works closely with the Dean of the Sam Fox School and the Assistant Dean of Finance to oversee the budget and the allocation of resources for the undergraduate and graduate programs, annually evaluates faculty and staff, and makes recommendations to the Dean of the Sam Fox School for salary merit increases. The Dean of Architecture oversees faculty recruiting, initiates searches, and makes hiring recommendations to the Dean of the Sam Fox School. The Dean of Architecture is responsible for leading the tenure and promotion process and evaluating of the faculty in accordance with the Sam Fox School "Policy on Faculty Appointment, Retention, Tenure, and Promotion," including oversight of faculty mentoring. The Dean of Architecture serves as an ex officio member of the Sam Fox School Dean's Advisory Committee on Tenure and Promotion. The Dean of Architecture is responsible for assigning faculty teaching loads, teaching assignments, committee assignments, and recommendations to the Dean of the Sam Fox School for professional development leave. The Dean of Architecture is responsible for alumni, community, and professional relations and participates in fund raising activities. The Dean of Architecture serves as an ex officio member of the University's Buildings and Grounds Committee.

Director of Graduate Programs: The Director of Graduate Programs is an eleven-month-per-year, five-year appointment, appointed by the Dean of Architecture. The Director is responsible for working with the Dean of Architecture and the program chairs to nurture creative and scholarly initiatives within the graduate programs and to articulate a vision for the programs including planning, coordination, and implementation of curricula, and their interdisciplinary and collaborative intersections. The Director coordinates dual degree offerings, oversees advising, and edits *Approach*, the annual publication of student work from the graduate programs. The Director works closely with the Dean of Architecture and program chairs in making recommendations for teaching assignments and visiting faculty. The Director is responsible for oversight and management of accreditation for the Master of Architecture program and Master of Landscape Architecture program.

Director of Undergraduate Programs: The Director of Undergraduate Programs is a ten-month-per-year, three-year appointment, appointed by the Dean of Architecture. The Director is responsible for planning, coordination, and implementation of curricula for the Bachelor of Design, Major in Architecture, and Bachelor of Science in Architecture degrees. The Director of Undergraduate Programs works with the Director of Graduate Programs to provide coordination between the undergraduate and graduate programs. The Director is responsible for the oversight of the Urban Design minor.

Program Chairs: The chairs of Architecture, Landscape Architecture, and Urban Design are nine-month-per-year, three-year appointments, appointed by the Dean of Architecture. The chairs provide disciplinary expertise and leadership in guiding the directions of the graduate degree programs and the continuing evolution and refinement of the program curricula. The chairs work with the Director of Graduate Programs and the Dean of Architecture in the development, implementation, and monitoring of learning outcomes and assessment. Chairs assist with making teaching assignment and teaching assistant recommendations and organize and coordinate reviews and guest

critics. The chairs work with the Director of the Graduate School and Registrar to ensure academic standards and curriculum requirements are met and coordinate communication with students about academic progress and disciplinary actions.

Director of International Programs: The Director of International Programs is appointed by the Dean of Architecture and oversees planning and administration for undergraduate and graduate international programs.

College of Architecture and Graduate School of Architecture & Urban Design
Faculty and Governance

As outlined in the "Policy on Faculty Appointment, Retention, Tenure, and Promotion" and consistent with University standards, the faculty of the College of Architecture and Graduate School of Architecture & Urban Design consist of tenured, tenure-track, professor of practice, senior lecturers, lecturers, and emeritus faculty appointments. Lecturer appointments may be full-time (teaching 9 credits per semester) or part-time and range from semester-long appointments to three-year appointments for some full-time senior lecturers. All tenured and tenure-track appointments are full-time. All full-time faculty are encouraged and expected to participate fully in faculty meetings and discussions concerning issues of importance to the School and to serve on committees. Part-time faculty are also encouraged to participate. Voting on governance matters, including votes on faculty hiring, resides with the tenured and tenure-track faculty. Professor of practice and emeritus faculty do not vote. Votes on faculty searches are advisory to the Dean of Architecture; votes on tenure and promotion are recommendations to the Dean and to the Sam Fox School Tenure and Promotion Committee.

All full-time faculty are encouraged and expected to participate in Sam Fox School faculty meetings and discussions concerning the governance of the School. Voting for all Sam Fox School matters resides with the tenured and tenure-track faculty. Tenured and tenure-track faculty are eligible to serve on Sam Fox School committees.

The Dean of Architecture manages the College of Architecture and Graduate School of Architecture & Urban Design in close collaboration with the faculty and the Architecture Cabinet, which meets bi-weekly. The cabinet consists of the Director of Graduate Programs, the Chair of Architecture, the Chair of Landscape Architecture, the Chair of Urban Design, and the Director of Undergraduate Programs. Cabinet meetings provide a forum for discussion and decision making regarding curriculum evolution, faculty teaching assignments, visiting faculty, space utilization, and the general administration of the academic programs. Other faculty, when appropriate, are invited to participate in the Cabinet meetings.

The Dean of Architecture leads monthly faculty meetings during the academic year for all faculty, which provide a forum for communication, discussion on important matters affecting the School, discussions and votes relating to curricula, and committee reports. Student representatives of the Graduate Architecture Council (GAC) and the Architecture School Council (ASC), attend these faculty meetings, as does the Registrar for Architecture. Bi-monthly faculty meetings of tenured and tenure-track faculty provide a venue for ongoing discussion of long-term planning, curricula evolution, new programs and initiatives, and general discussion of disciplinary directions and interdisciplinary intersections.

College of Architecture and Graduate School of Architecture & Urban Design Committees

The Dean of Architecture makes committee assignments for the academic year. All full-time faculty serve on committees. Both undergraduate and graduate students serve on most committees (see below).

Operational Committees

Tenure and Promotion Committee: This committee consists of all tenured faculty for review of tenure and promotion to associate professor, and full-professors only for review of promotion to professor. The committee makes recommendations to the Dean on tenure, promotion, and evaluation matters according to the *Sam Fox School Policy on Faculty Appointment, Retention, Tenure and Promotion*.

Graduate Admissions Committee: This committee reviews procedures, applications, and portfolios for admission to the graduate program. The committee makes the final selection of admitted students and makes scholarship recommendations to the Graduate Financial Aid Committee. This committee is chaired by the Associate Dean of the Sam Fox School and includes the Director of Graduate Programs and program chairs, the graduate coordinator, and student representatives. The Dean of Architecture serves as an ex officio member.

Graduate Financial Aid: This committee reviews and sets policy for graduate financial aid packages and makes recommendations for scholarships. This committee is chaired by the Dean of Architecture and includes the Director of Graduate Programs, program chairs, the graduate coordinator, the Associate Dean, and the Assistant Dean for Finance of the Sam Fox School.

Public Lecture Series Committee: This committee oversees the process of soliciting recommendations and choosing the lecturers for the Public Lecture Series. This committee is chaired by a member of the faculty and includes faculty and student representatives.

Exhibitions: This committee oversees the solicitation and coordination of all exhibitions for Architecture. The Committee reviews and makes recommendations to the Dean in relation to requests for the hosting of external exhibitions. This committee is chaired by a member of the faculty and includes faculty and student representatives.

Steedman Committee: This committee oversees and administers the bi-annual international Steedman Competition and the annual summer Steedman Travel Award. This committee includes a member appointed by the President of the local chapter of AIA, a faculty member, and a member of the practicing architectural community appointed by the Dean of Architecture.

Academic Committees

Curriculum Committee: This committee oversees and recommends all curricular changes and new degree initiatives for undergraduate and graduate programs, which are presented to the tenured and tenure-track faculty for review and vote. The committee reviews NAAB degree designation requirements and manages these requirements relative to accreditation. This committee is chaired by a senior member of the faculty and includes the Director of Graduate Programs and the Director of Undergraduate Programs, the program chairs, members of the faculty, and student representatives.

History/Theory Committee: This committee reviews and designates electives that fulfill the history/theory requirements in the graduate Architecture curriculum. The committee

also proposes curricular discussion and evolution relative to required and elective history/theory coursework.

Technology Committee: This committee reviews and designates electives in technology. The committee also proposes curricular discussion and evolution relative to required and elective technology coursework.

Digital Design Committee: This committee reviews and designates electives in digital design. The committee also proposes curricular discussion and evolution relative to required and elective digital design coursework.

General Electives Committee: The committee reviews and designates general electives.

Ad Hoc Committees and Appointments

Search Committees: These committees are constituted as needed for the recruitment and hiring of tenure-track faculty. Search committees are appointed by the Dean of Architecture and are chaired by a member of the faculty and include faculty members of Architecture, one Art faculty member recommended by the Dean of Art, and a student representative. Search procedures, including specific measures for increasing minority applicants, are outlined in the *Sam Fox School Policy on Faculty Appointment, Retention, Tenure, and Promotion*.

Work Groups: When needed, work groups are formed to address specific issues and initiatives.

Appointments: In addition to committees, faculty serve in the following capacities: Art and Architecture Library liaison, University Graduate Council Representative, Arts & Sciences Representative, Faculty Senate Representative, ACSA Councilor, and IDP Coordinator.

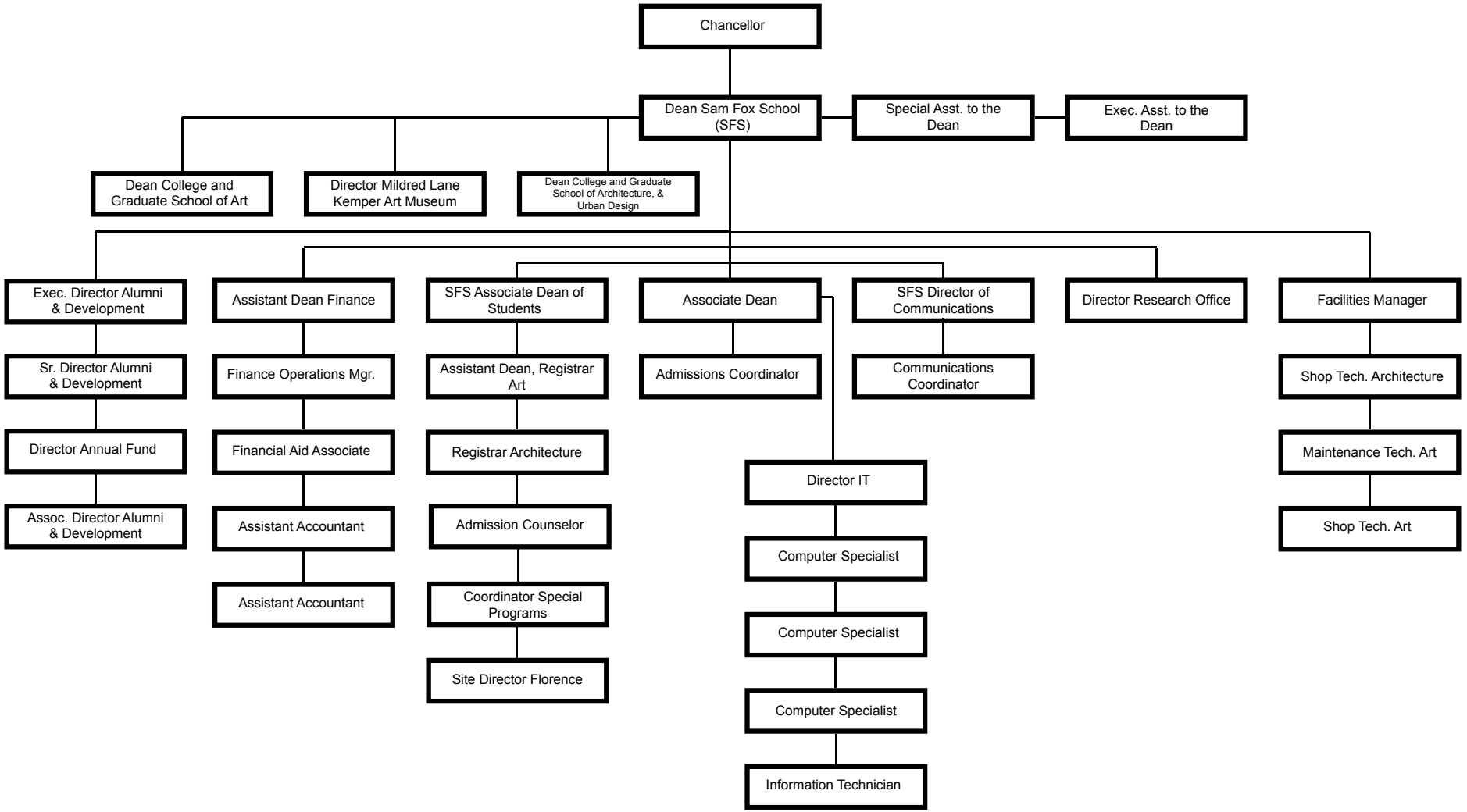
Degree Programs

Graduate dual degrees are offered in addition to the primary Master of Architecture degree. Students can obtain a second degree in Landscape Architecture, Urban Design, Business, Social Work, or Construction Management.

The College of Architecture offers a Bachelor of Science and a Bachelor of Design in Architecture. A Bachelor of Design degree has been approved and is being developed. Minors are offered in Architecture for students who are not in the College of Architecture. In addition, minors in Urban Design, Furniture Design, and Architectural History are offered.

Exhibit C: Sam Fox School of Design and Visual Arts

administrative structure, 2011



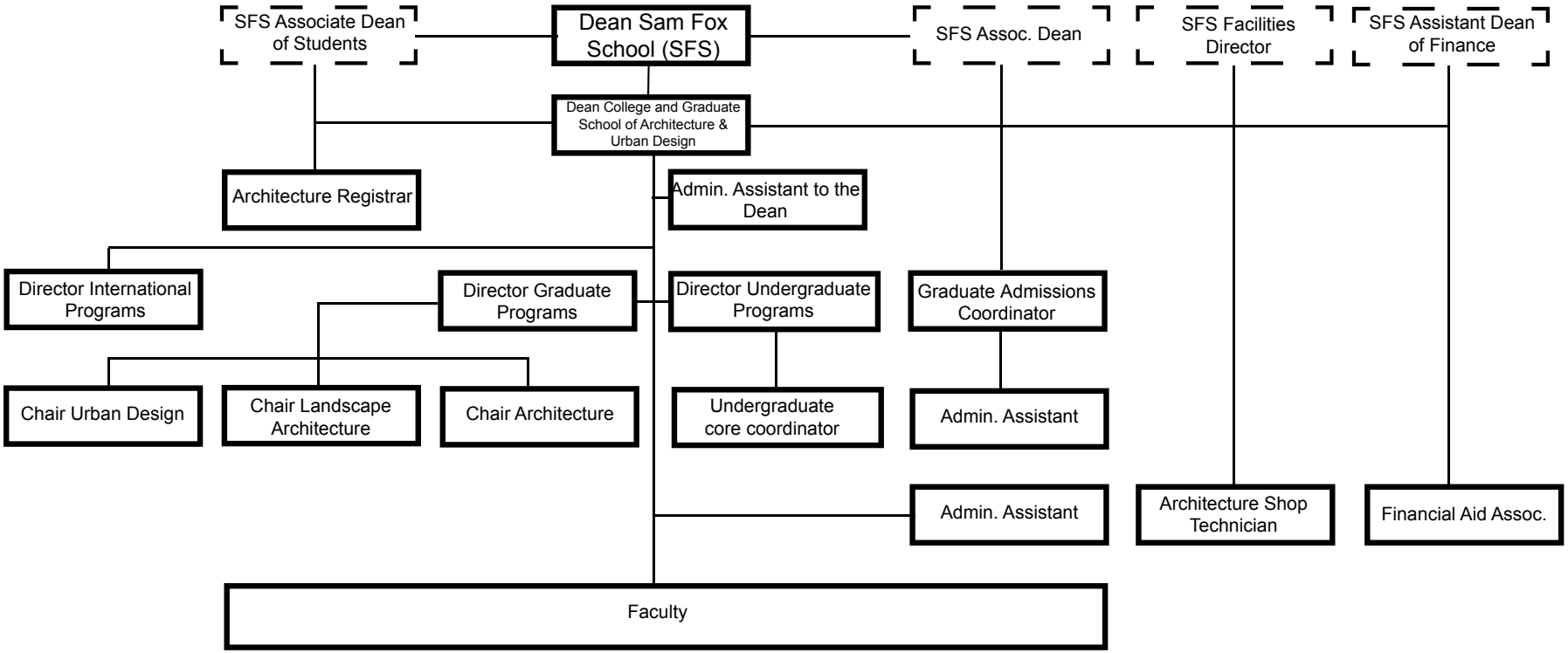
Sam Fox School Cabinet

Dean Sam Fox School, Dean Art, Dean Architecture, Museum Director
Director Graduate Programs Architecture, Director Undergraduate Programs Architecture, Director Graduate Art,
Associate Dean, Assistant Dean of Students, Assistant Dean Finance
Exec. Director Alumni & Development, Director of Communications, Special Assistant to the DeanExhibit

College of Architecture Graduate School of Architecture & Urban Design

administrative structure, 2011

Sam Fox School of Design & Visual Arts
Washington University in St Louis



Dean's Cabinet

Dean
Director Graduate Programs
Chair, Architecture
Chair, Urban Design
Chair, Landscape Architecture
Director Undergraduate Programs

I.2.3 PHYSICAL RESOURCES

Physical Facilities, General Descriptions

The Sam Fox School Campus

The Sam Fox School campus consists of five buildings for studio-centered architecture, art, and design education composed around a series of public courtyards, foyers, galleries, and lecture halls. The School is further centered around shared facilities for information resources (the Art and Architecture Library), digital technologies and machine fabrication workshops, and the exhibition of art, architecture, and design (the Mildred Lane Kemper Art Museum). The Sam Fox School campus buildings are linked both above ground and underground through connecting porticos, walkways, glassed stair-towers, and corridors. Between 2001 and 2007, $60,000,000 was committed to the renovation of the three existing buildings at the east end of the Danforth Campus, and to the construction of two new buildings for the newly named and organized School. Two annex buildings – Forsyth House and the Lewis Center MFA Studios – further expand the territory and facilities of the School.

Givens Hall

This compact and elegant building, designed in a modernized Beaux-Arts manner, has housed Architecture's programs since 1932; renovated in 2001 as part of the SFS project, Givens Hall continues to serve as Architecture's central building for studios, seminars, administrative offices, and most faculty offices. The Beaux-Arts design has as its heart a grand central stair, used often for socializing and informal meetings. Faculty offices adjoin the central stair landings on all levels. Givens 1E organizes the Sam Fox School Deans' Office suite, the Dean of Architecture Office, the Dean of Art Office, and the offices for the Directors of the Graduate and Undergraduate Programs in Architecture. Givens 1W organizes digitally-equipped Kemp Lecture Hall (90 seats), and four digitally equipped 20-40-seat seminar rooms; the seminar rooms also double as pin-up and review space on studio days, and for mid-term and final reviews.

Givens Hall houses two full-floor design studio spaces, each nearly 10,000 square feet - Givens 2W-2E, with 20-foot ceilings and large windows, and Givens 3W-3E, which are more intimate, sky-lit ateliers. Students are organized by studio groups, with each student provided with an individual, L-configured workstation. The studios are hard-wired and networked, but the entire Sam Fox School is a wireless community as well. Students are required to arrive into the graduate programs with a specified laptop computer; printers are provided directly on studio levels, with plotters situated in the Whitaker Computer Laboratory (see below).

Wood and metal machine workshops are located in the lower level of Givens Hall. The fabrication workshop is used extensively for hands-on experimentation with materials, model building, full-scale detail construction, and furniture design and fabrication. Adjacent to the machine shops, the Digital Fabrication Labs in Givens Hall house laser cutters, milling machines, and 3-D printer technology for use by advanced students in studios and digital media courses, and feature an ever-increasing inventory of digitally controlled equipment.

Steinberg Hall

Linked to Givens Hall (east) is Steinberg Hall; designed by Fumihiko Maki and completed in 1960, the building was renovated in 2007 as part of the SFS project. In the SFS campus, Steinberg is increasingly the "front door" to the School; its foyer provides access to the main level Architecture Gallery, the 300 seat Steinberg Auditorium (used for Architecture's lecture classes and the Public Lecture Series), and Etta's Café, providing service Sunday-Friday weekly. Steinberg's second level provides Architecture

with additional graduate program studio space (50 desks), adjacent informal pin-up/review spaces, as well as two digital instruction classrooms (with plotters), a seminar/conference room, and faculty offices. Steinberg's second floor is also partly occupied by senior/junior Art majors in Communications Design. Steinberg's lower level organizes studio spaces, classrooms, laboratory facilities, a small exhibition gallery, and faculty offices for the College of Art programs in Communications Design and Photo/Digital Imaging.

Bixby Hall / Walker Hall

Linked to Steinberg Hall (east) is Bixby Hall, a 1927 Beaux-Arts building housing predominantly College of Art studios, classrooms, and labs. Similar in size and character to Givens Hall, Bixby has recently provided studio space and faculty offices for Architecture, at both the graduate and undergraduate levels. Graduate architecture studios focused on larger-scale digitally fabricated constructions, or "double-studios" (20 students and two instructors), have found Bixby's west-end studios conducive to their methods and ambitions. Bixby Hall is also the location for the Sam Fox School's Student and Financial Services staff offices suite. Bixby Hall was renovated in 2001 as part of the SFS project.

Walker Hall, linked to Bixby Hall's north by a covered walkway, is a 2006 building designed by Fumihiko Maki as part of the SFS project. Walker Hall is a three-story studio and machine workshop facility (including kilns and casting) predominantly for College of Art majors in Painting, Sculpture, and Book Design. Architecture freshmen studio spaces are located on the ground floor of Walker Hall.

Kemper Art Museum Building

The Mildred Lane Kemper Art Museum building is the centerpiece of Fumihiko Maki's 2006 design for the Sam Fox School campus. The Museum building's main level aligns its entry foyer with the School's central plaza and Steinberg Hall's foyer, creating a sequence of exterior public spaces and interior social areas. The Museum's foyer provides access to two large changing exhibition galleries on the main level and, by stair and elevator, to the Museum's permanent collection galleries on the second level. Museum staff offices and faculty offices for the Department of Art History and Archaeology are located on the Museum's second floor as well.

For Architecture, in addition to the Museum's exhibitions galleries, the Kemper Museum building provides two significant resource areas:

Kenneth and Nancy Kranzberg Art & Architecture Library

In 1960, the library collections of Architecture and Art were merged and housed together in Steinberg Hall. In summer 2006, the collections were moved to the new Kranzberg Art & Architecture Library in the Mildred Lane Kemper Art Museum building. The Library's collection includes more than 105,000 volumes in all formats. Its valuable collection, depth, and electronic access make it a leading library of its kind in the Midwest. The library has an impressive set of first editions and rare material, including the David Bryce collection of rare architectural books, the Russell Sturgis collection of 15,000 19th-century architectural photographs, 17th- and 18th-century architectural engravings and books, rare Chinese and Japanese scrolls, and important examples of 21st-century American and European architectural periodicals, exhibit catalogs, and books. The collection continues to grow with the annual acquisition of approximately 2,000 new books, periodicals, videotapes, DVDs, and CD-ROMs in architecture, landscape architecture, urban design, and the visual arts. The Kranzberg Library is accessible from the Museum building main entrance and by underground corridors linking Givens, Steinberg and the Kemper buildings.

The Whitaker Learning Laboratory/Digital Technologies Resources/ Fabrication Workshops

The Sam Fox School of Design & Visual Arts is a wireless communication community that encourages the flexible use of laptops to facilitate digital media-based education. The Whitaker Learning Lab, located in the Kemper Art Museum, provides scanning, printing, and plotting equipment available to all students in architecture and art as well as digitally enhanced classroom spaces for high-end representational teaching needs.

Whitaker Laboratory
Digital Classroom, Printing and Plotting

Item	quantity	description
Computers	30	Mac Pro 2 processors 8 gb 1 g video card
Tablets	21	Wacom Stylus Pro
Color 11 x 17 printer	2	HP CP6015
Black and White 11 x 17 printer	2	HP 9050
DesignJet 4000 series	4	Design Jet 4000ps
DesignJet t7100	2	DesignJet t7100 ps
11 x 17 scanner	5	Epson Expersion 10000XL
Flat-screen Carts	5	Toshiba and HP monitors on rolling carts
Epson Plotters 9800 series	2	Epson 9800
44 large format scanner	1	
3D Scanner	1	NextEngine

Steinberg 203
Architecture Teaching Lab

Item	quantity	description
Computers	12	Mac Pro 2 processors 8 gb 1 g video card
11 x 17 scanner	2	Epson Expersion 10000XL
Designjet 4000ps	1	Design Jet 4000ps
slide scanner	1	Microtek

Steinberg 204
Architecture Teaching Lab

Computers	17	Mac Pro 2 processors 8 gb 1 g video card

Software	version	
Final Cut Pro, video editing		
Abode Master Suite	5	Photoshop, Illustrator, InDesign, Acrobat Pro, Flash, Dreamweaver, After Effects, Premiere, Soundbooth, Encore,
Office	2010	Word, Excel, Powerpoint
Bentley System	13	Generatives Components Vi8
Rhino	4	MasterCAM, Flamingo, T-Spline, Monkey, and Grasshopper

software	version	
Maya	2012	
Autodesk	2012	AutoCAD, Revit, 3DMax, Ecotect, Sketchbook
ArcView GIS	10	
Sketchup Pro	7	
ArchiCAD	13	

Architecture Fabrication Shop
Givens Room 3

Item	quantity	description
Jet 2000 AFS	3	internal air filtration units
External vented snorkels	4	
7 HP Environmental controls		central dust collection
10 inch Delta Table table saw		
Saw Trax 7-1/4 Inch inch panel saw		
Mini max 20 inch band saw		
Delta 14 inch band saw		
Delta 10 inch band saw		
Hitachi 10 inch compound sliding miter saw		
Hitachi 8 power miter saw		
Hammer A3-31 12 inch jointer/ planer		
Rockwell 14 inch drill press		
Delta 14 inch drill press		
Bench dog router table		
Delta Hollow chisel mortise station		
48 inch x 6 inch edge belt sander		
Proxxon 2 inch table saw		
Proxxon 3 inch chop saw		
Proxxon hot wire cutter	3	
Magnabender sheet metal break 48 inches		
Traditional 48 inch leaf break		
Pexto 36 inch finger break		
Tensmith 38 inch foot shear		
J&L pivoting liquid cooled 7x7 inch horizontal band saw		
Jet 14 inch vertical band saw for metal only		
Hossfeld bender #1		
Millermatic 150 amp Mig.		
Millermatic 85 amp Mig		
Miller 135 amp portable Mig		

Item	quantity	description
Miller shopmatic 185 Tig, stick welder		
Victor oxy acetalyne torches		
Delta and J7L Pedestal grinders, polishers		
Delta disk sander, edge conditioner		

Complemented by a hand power tool inventory (pneumatic and electric) of over 50 common and specialized tools for use in the shop and at specific sites outside the shop.

Digital Fabrication Facility
Givens Room 4

Item	quantity	description
Universal laser systems x-660		Laser cutters with dedicated exterior
Universal laser systems PLS120 D 60 watt	2	exhaust systems
Dimension BST 3D printer		
Stratasys Fortus FDM 200		soluble support machine
Roland MDX 650 CNC mill		
Axyz 60x 96 15 HP CNC router		vacuum table hold down
36x36 inch heated platen oven		for thermoforming
48x96 inch silicone bag vacuum frame press		for plastics forming

Room has vented spray booth, air filtration, and dedicated dust collection.

Facilities Operations (Services, Issues and Planning)
Physical Facilities (Proposed/ In Planning)

The Sam Fox School is now contemplating the realities of what it means to achieve the vision of its strategic plan, in terms of people, facilities, and resources. As goals are pursued and met -- in some cases more quickly than anticipated – the School is celebrating its successes while assessing related challenges and opportunities:

- In the last 5 years, the Sam Fox School has seen a 33% jump in graduate architecture enrollment, with 320 students currently enrolled. The MFA program has also increased significantly in five years from 28 to 52 students -- an 85% increase. The School's total undergraduate and graduate enrollment hit its highest point this year at 880. This growth is a testament to the success of the School's vision, strong faculty, and creative resources. However, students are now short on adequate studio and fabrication spaces, and the School cannot continue to compete with the strongest programs in the country without an addition to its teaching and making facilities.

- The Sam Fox School is meeting the curricular goals laid out in the *Design for Excellence*, including the introduction of a Master of Landscape Architecture program in 2010 and a new undergraduate curriculum in Fall 2011. These advances have created new needs for faculty offices, studio spaces, and shared classrooms.

- The Sam Fox School has recruited a faculty of noteworthy distinction. However, faculty members lack sufficient office space to effectively meet their needs for

student interaction and research. Most faculty share offices with up to three colleagues and have insufficient room to conduct private meetings, small review sessions, or advising sessions. Faculty members generally engage in research off campus, making collaboration and cross-disciplinary initiatives a challenge.

- The Sam Fox School has successfully established a Research Office that is facilitating unique funded research opportunities ranging from the visual depiction of cancer research data to the development of sustainable building exteriors for adaptive re-use structures. The School submitted 28 proposals for funding last year and secured more than $188,000 in external research grants. In order to build on this success, space is needed to facilitate both the conversations and administrative work associated with funded research activity.

- The Kemper Art Museum is adding major works to its collection through both gifts and purchases; more than 180 works were added since 2008. The School has also succeeded in developing an Art on Campus Policy that was approved by the Building and Grounds Committee of the Board and the Chancellor in June 2010. As the Museum's collection grows – including new works accessioned through the Art on Campus program -- it is imperative that a conservation lab be added to provide treatment for the museum's valuable collection and ensure its preservation into the future.

- The Sam Fox School added the world-class Mildred Lane Kemper Art Museum and the Earl E. and Myrtle E. Walker Hall in 2006 to further the creative resources of the School and University. The current Sam Fox campus is a wonderful ensemble of discipline-specific buildings that adds character to collective discussions of architecture and art and provides spaces conducive to learning, thinking, and creating. But, the current spaces do not include enough capacity for all the activities of the School at its current level of enrollment, nor do they fully facilitate the 21st century interdisciplinary activity that is the aspiration of the Sam Fox School. The School in its current state can not accommodate all graduate art and architecture students, and it is imperative to bring all graduate studies to the Sam Fox School's Danforth Campus site to fully realize the interdisciplinary model and to provide students with the richest possible educational experience.

It is at this intersection of success, challenge, and opportunity that the Sam Fox School has engaged in a comprehensive space planning study to develop a facilities master plan that allows for ongoing realization of the School's strategic goals. As a result of the study, the School has developed a plan for a graduate architecture and art building that meets a majority of the School's physical space needs, fulfills the vision for interdisciplinary art and design education leadership, and also meets a broader campus role.

The graduate architecture and art building, envisioned as a symbol of the University's commitment to creativity activity and research in art and design in the 21st century, will link the future of the Danforth Campus to its rich cultural history and, through its location near the eastern edge of campus, bridge the University with the immediate St. Louis community. The Sam Fox School will lead by example and commit to a design of global significance that affirms its position in the forefront of contemporary art and design education. Acknowledging pressing current issues as well as traditions of the past, the graduate architecture and art building will embody the tenets of sustainability and accessibility and respect the adjacent modernist buildings designed by Fumihiko Maki, the School's historic beaux-arts Givens and Bixby Halls, and the Collegiate Gothic style of the original Cope and Stewardson Plan. Most importantly, the facility and its environment will foster innovation through intellectual, cultural, technological, and social intersection and the exchange of ideas and knowledge.

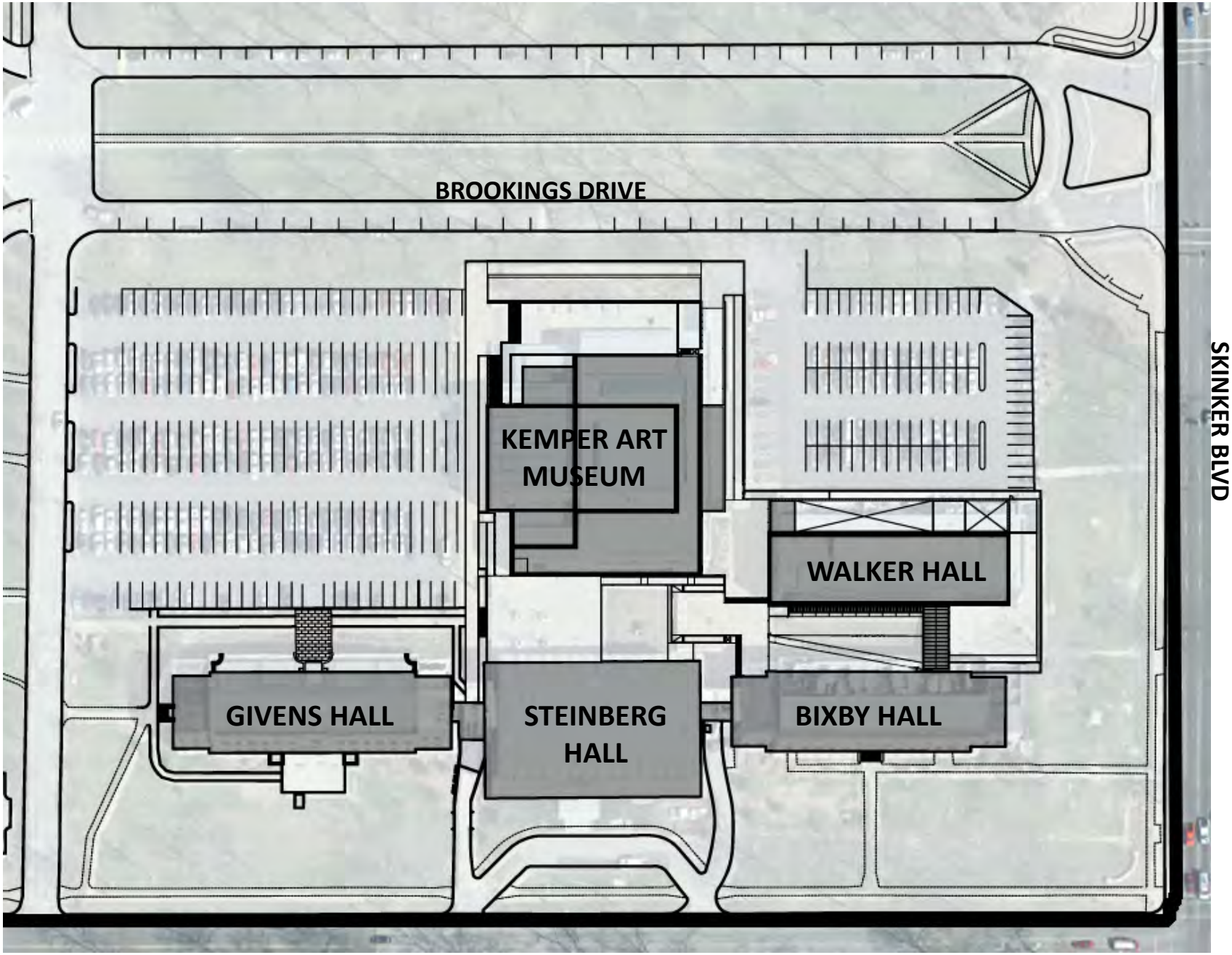
Program in the new graduate architecture and art building will embody the School's vision to integrate art and design education by bringing together the graduate architecture, landscape architecture, and urban panning programs with the MFA program and a new MFA in design program. Each program will be identified as a discrete area of study as well as a point of departure for the myriad intersections of these fields. The facility will offer a robust environment that integrates scholarship, creative research, and entrepreneurship and takes full advantage of the intellectual resources at Washington University's Danforth and Medical School campuses, as well as local, national, and international industry leaders. The graduate students housed in the building will benefit from important adjacencies to the Mildred Lane Kemper Art Museum, the Kenneth and Nancy Kranzberg Art & Architecture Library, the Whitaker Learning Lab, and the historical heart of the School in Givens, Bixby, and Steinberg Halls.

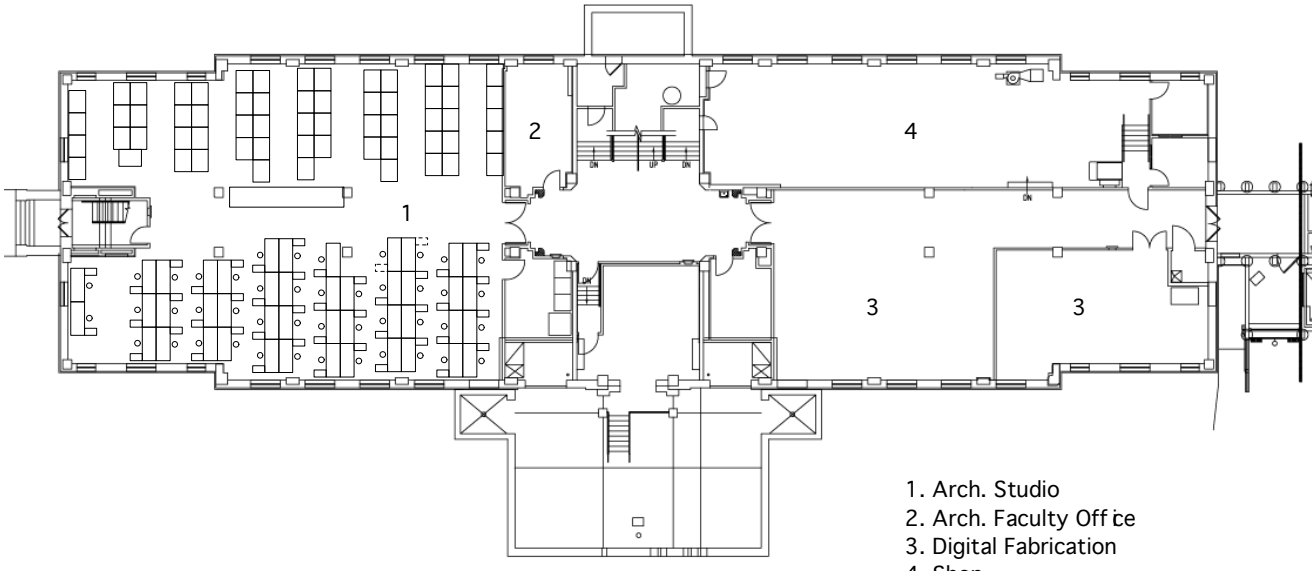
Initial planning for the graduate architecture and art building is based on a comprehensive space study, completed by Ayers, Saint, Gross Architect + Planners, which identified both the needs and the opportunities for a 61,500 ASF interdisciplinary graduate art and design facility, with a total gross square footage of 82,000. Elements in the new building will include the following:

- Studios for graduate architecture, landscape architecture, urban design, graduate art, and graduate interdisciplinary design (42,500 sq. ft.)
- Faculty offices (4,000 sq. ft.)
- Classroom space (2,000 sq. ft.)
- Exhibition space (2,000 sq. ft.)
- Critique and review spaces (1,500 sq. ft.)
- Research office (500 sq. ft.)
- Digital fabrication and technology spaces (4,000 sq. ft.)
- Museum conservation laboratory (3,000 sq. ft.)
- Social spaces (2,000 sq. ft.)

The graduate architecture and art building will be a laboratory for advances in both art and design practice and instruction. As a gateway to the Danforth Campus, it will also herald the University's interconnectedness with people, organizations, and ideas across the city and beyond. The Sam Fox School anticipates with excitement the magnitude and challenge of this significant project, which will facilitate a new brand of art and design leadership that shapes the future of our collective built environment and visual culture.

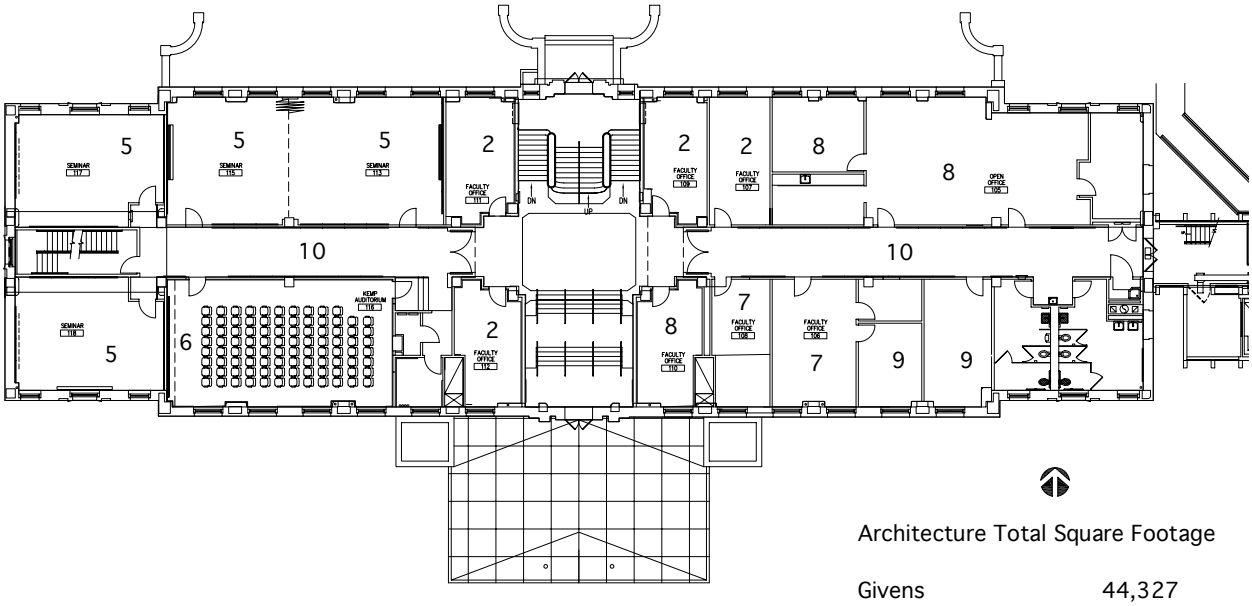
Sam Fox School Facilities





Givens Hall Ground Floor
14,750 GSF
All Arch.

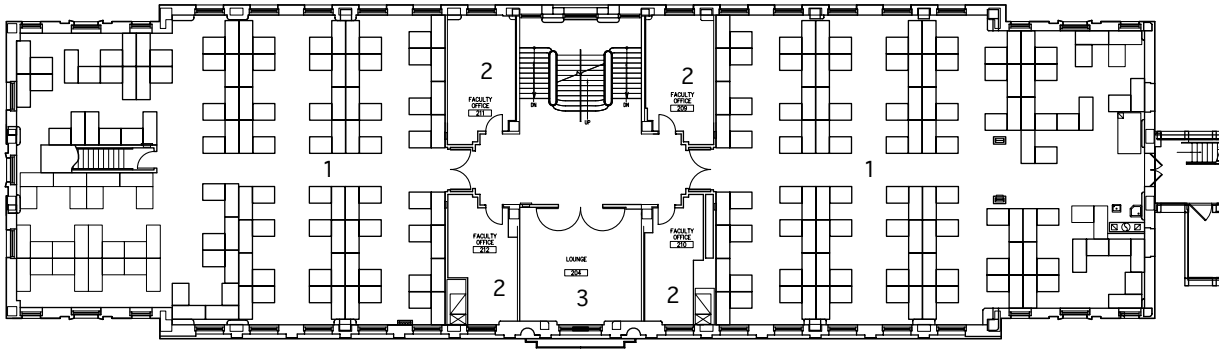
1. Arch. Studio
2. Arch. Faculty Office
3. Digital Fabrication
4. Shop
5. Classroom critique
6. Classroom
7. Arch. Admin.
8. Sam Fox Admin.
9. Art Admin.
10. Exhibition



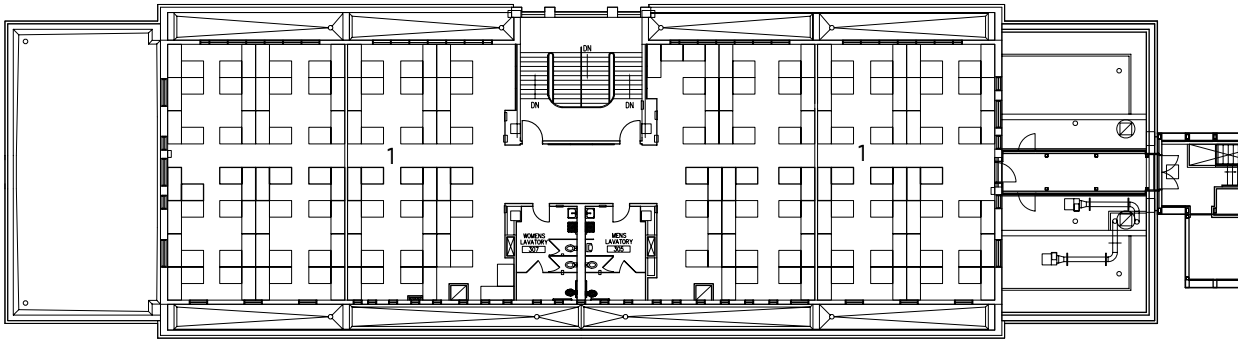
Givens Hall 1st Floor
12,226 GSF
Arch. 9,226 SF

Architecture Total Square Footage

Givens	44,327
Steinberg	10,671
Bixby	2,000
Walker	2,100
Forsyth House	
Total	

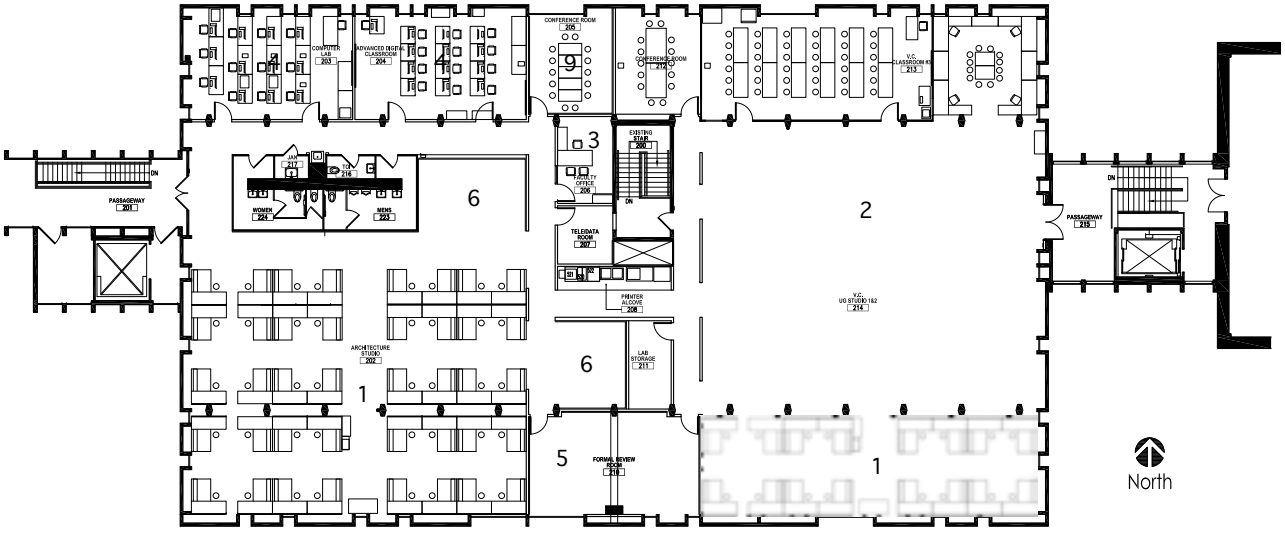


Givens Hall 3rd Floor
7,963 GSF
All Arch.

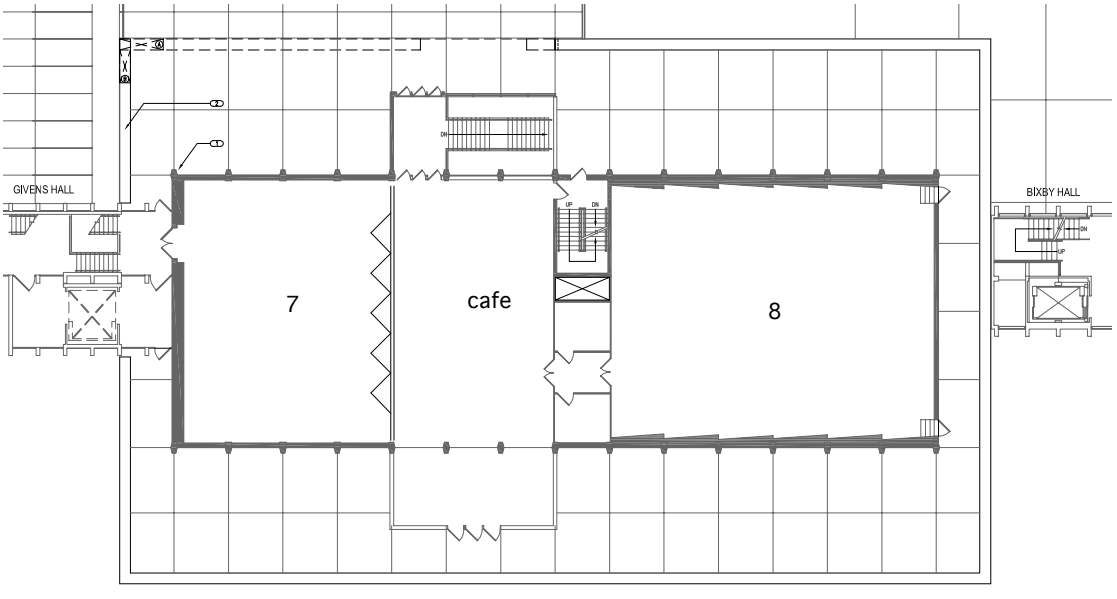


Givens Hall 2nd Floor
12,415 GSF
All Arch.

1. Arch. Studio
2. Arch. Faculty Office
3. Critique

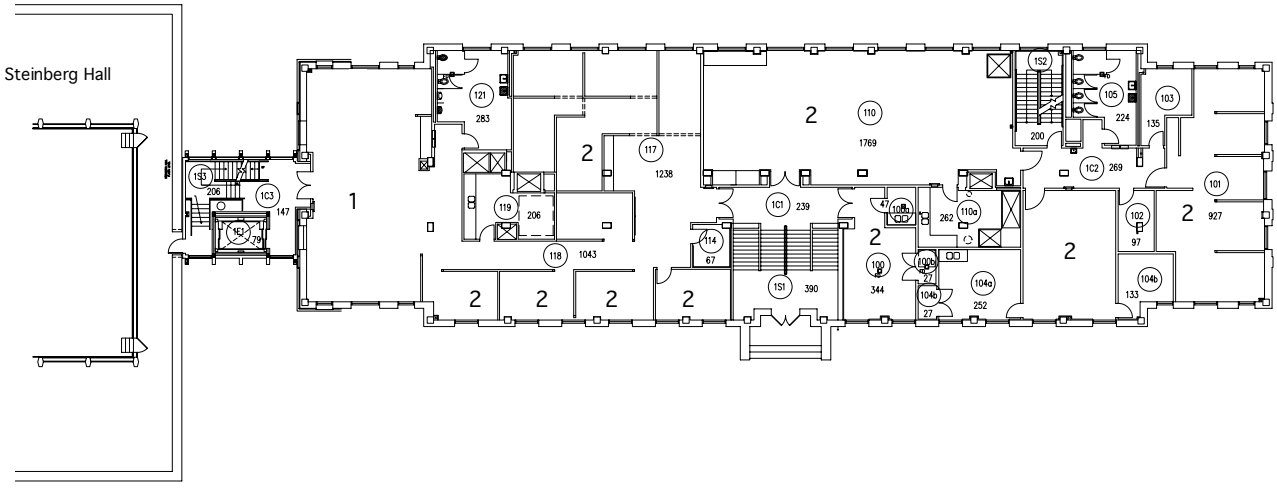


Steinberg Hall 2nd Floor
13,720 GSF
Arch. 8,850 SF



Steinberg Hall 1st Floor
9,500 GSF
Arch. 1,821

1. Arch. Studio
2. Art Studio
3. Arch. Faculty Office
4. Computer Lab
5. Classroom critique
6. Critique
7. Exhibition / Critique
8. Lecture Hall (university classroom)
9. Sam Fox Conference Room


Steinberg Hall
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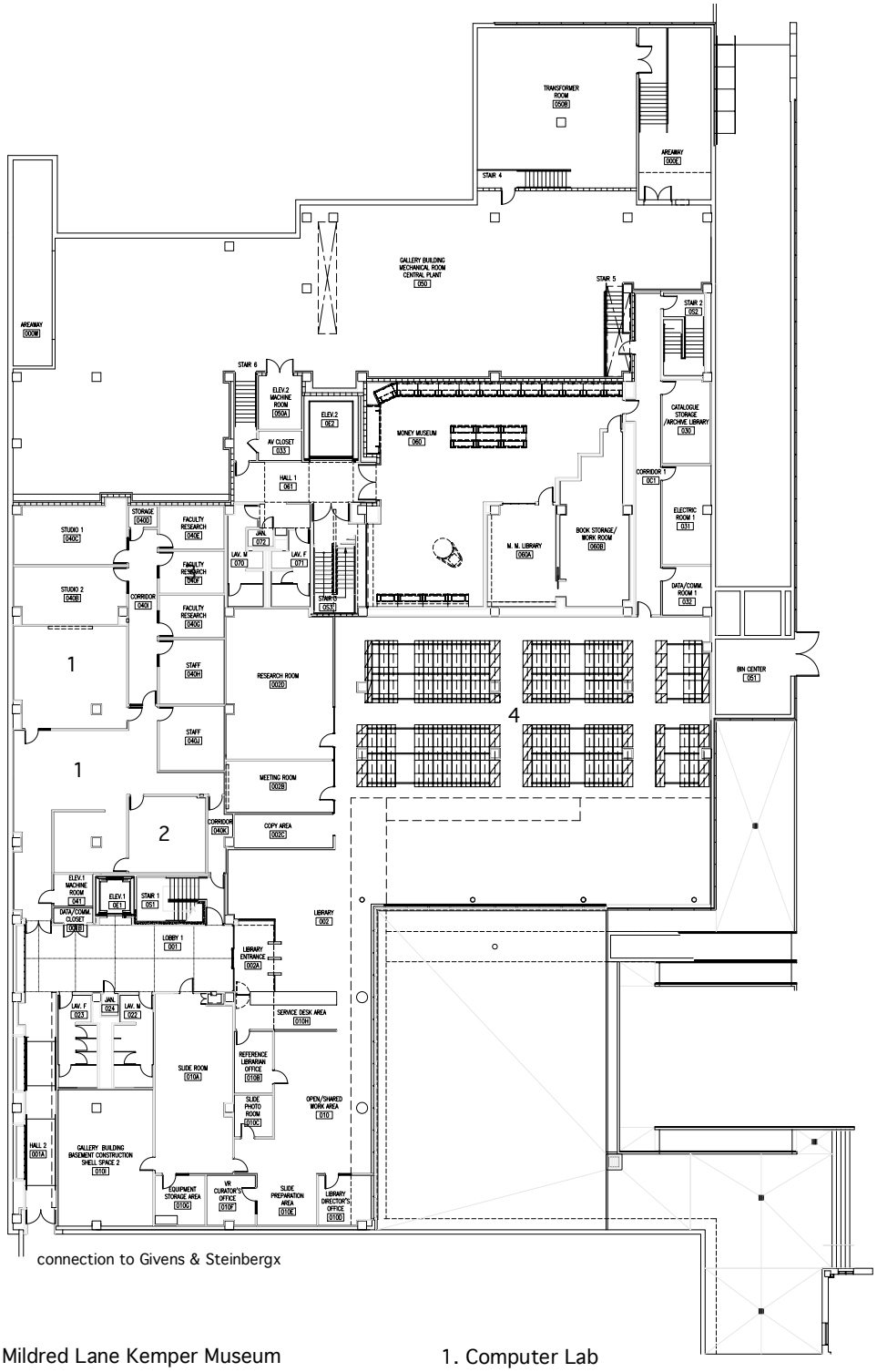
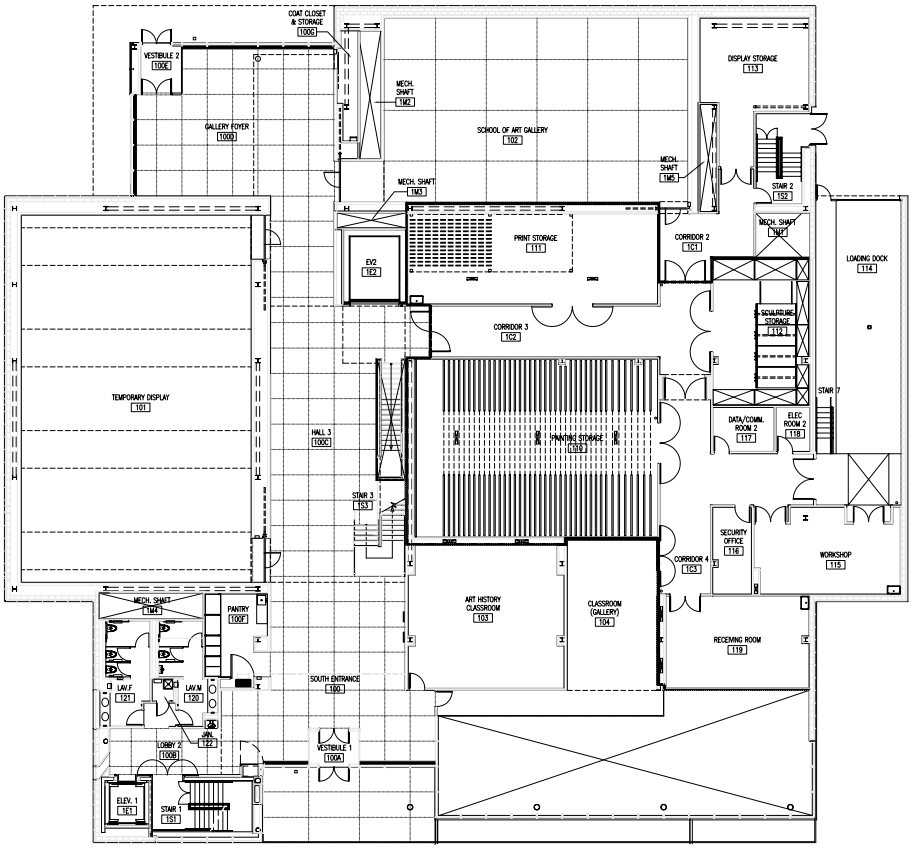


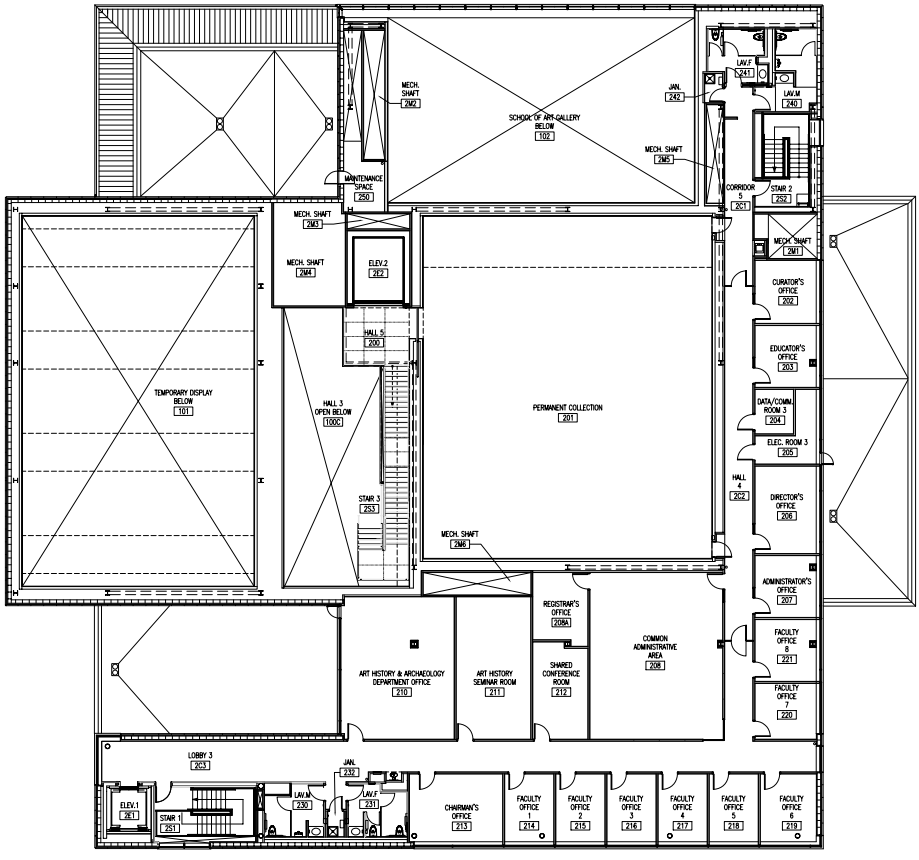
connection to Givens & Steinbergx

Mildred Lane Kemper Museum
Library Lower Level
facilities shared with Art

1. Computer Lab
2. Plotting & Printing
3. Arch. Faculty Office
4. Art & Arch. Library



Mildred Lane Kemper Museum
Main Gallery Level



Mildred Lane Kemper Museum
Second Level

I.2.4 FINANCIAL RESOURCES

In 2005, when the Architecture program at Washington University last received NAAB accreditation, it operated as a stand-alone academic and financial unit within the larger University system. Beginning in Fiscal Year (FY) 2007, a new structure was implemented joining the College of Architecture and Graduate School of Architecture and Urban Design, the College and Graduate School of Art, and the Mildred Lane Kemper Art Museum into a single academic and financial entity, the Sam Fox School of Design & Visual Arts. The School operates under the leadership of the Dean of the Sam Fox School, who holds fiduciary responsibility for the budget of the School as a whole, including all financial resources and expenses.

Within the larger Sam Fox School budget structure, Architecture, Art, and the Museum maintain individual operating budgets, which are principally managed by the Deans of Architecture and Art and the Museum Director, respectively. In addition, a Sam Fox School administrative unit allows the School to leverage and benefit from shared resources. This administrative unit includes several employees previously supported by the individual Schools whose job responsibilities include financial operations, student registration, graduate financial aid, communications/publications, IT support, and general administrative support. The operating budget for this administrative unit also funds programs and capital expenditures such as the School's public lecture series, computing equipment, and academic facilities. The College of Architecture and The College of Art support the cost of the new administrative unit equally.

Considerable new funds for the Sam Fox School budget have been added by the Chancellor's Office to support strategic initiatives. These monies have significantly benefited the Architecture program, funding a tenure-track faculty position in Architecture; new digital fabrication equipment; a new School identity and website; renovations to Steinberg Hall to create a spacious Architecture exhibition and critique space; and new building and space planning fees for external consultants, focused heavily on accommodating growth in the graduate Architecture program. The Dean's initiative funds are also used annually to provide faculty research grants, teaching awards, graduate student travel grants, and staff awards.

Income for Architecture is reported according to the following categories:

Gross tuition and fees, separated by undergraduate and graduate income.

Endowment income, including income generated for both restricted and unrestricted categories of spending.

Gifts, which include restricted, annual fund and, until FY09, corporate gifts. (In FY10, the Chancellor began using these gifts to support specific School initiatives rather than distributing the income via allocations.)

Additional income categories, including grants and contracts, current funds investment income (CFII), educational sales and service, other income, and CFU endowment support. CFII income declined significantly beginning in FY09 as a result of the market downturn and lower short-term interest rates.

Expenses for Architecture are reported according to the following categories:

Salaries and fringes for faculty, staff, and students.

Financial aid, separated for graduate and undergraduate students.

Tuition allocation, defined as the net expenditure of funds paid to other units of the University for coursework taught outside the Architecture curriculum to Architecture students.

Controllable expenses, including travel, publications, programs abroad, student activities, faculty development, woodshop, digital fabrication, guest studio reviewers, faculty searches, teaching activities, exhibitions, and summer programs.

Prorations, debt service, rent, utilities, and insurance. Beginning in FY10, Architecture prorations for shared University resources, such as libraries, police, admissions, human resources, and facilities, as well as debt service, rent, utilities, and insurance, were absorbed by the administrative unit of the Sam Fox School. This expense moved to Mandatory General Reserve Transfers, representing Architecture's contribution toward Sam Fox School's administrative overhead.

Undergraduate gross tuition and fees declined significantly between FY10 and FY11 due to a change in University accounting practices. Previously, individual Schools collected all tuition from enrolled undergraduate students, credited all remission, and paid a formula-based tuition allocation fee to Arts and Sciences primarily for core liberal arts coursework. As of FY11, all undergraduate tuition and remission is now recorded in a central account, and an annual tuition payment is distributed to Schools based on a five-year average for units taught and net tuition income. Remission is charged to Schools based on the same five-year average. A decline in undergraduate tuition allocation expense balances the decline in gross tuition income. For most graduate-level classes, a free-trade agreement exists among the Schools of the University, eliminating tuition allocation for this coursework. However, part-time and evening continuing education classes, such as Construction Management at the School of Engineering and coursework offered through University College, are excluded from the agreement. Graduate tuition allocation expense varies significantly depending on interest and need among graduate Architecture students for this type of continuing education coursework.

Graduate Architecture applications and enrollment yields have significantly exceeded expectations since FY08, with total enrollment jumping from 181 in Fall 2007 to 318 in Fall 2010. This rapid growth, earlier than expected, led to an increase in income coupled with increased demands for space, faculty, and resources. The School was able to meet these demands by moving students to renovated and shared existing spaces on the Sam Fox School campus, adding a small renovated space for faculty offices, hiring new tenure-track faculty, drawing on the expertise of visiting and adjunct faculty, and accelerating new venues for international study. In many ways, these additions to faculty and programming have made the graduate experience richer and more diverse, but there is universal acknowledgement that the School cannot continue to grow without increased physical plant. In addition to internal forces, tempering ongoing enrollment growth, the graduate Architecture leadership recognizes that changing economic and market forces could have an effect on applications and enrollment yields. Several strategies have been identified to overcome any uncertainty in the admissions environment:

- Strategic student recruitment, including expanded recruitment among the growing population of international students and targeted recruitment throughout United States liberal arts colleges and universities;
- Focused growth in the new MLA program, the MUD program, and the M.Arch 3 program;
- Expanded emphasis on dual degrees that combine Architecture, Landscape, and/or Urban Design study, as well as existing dual degrees combining graduate Architecture with MBA, MSW, and MCM degrees;
- Expanded enrollment into the more diverse menu of MS post-professional programs aimed at five-year B.Arch graduates and international students, including the MSAAD, Master of Science in History/Theory, and Master of Science in Architecture Pedagogy;
- Increased financial aid; the School is in the midst of a $10 million Scholarship Initiative campaign that will allow for increased graduate student support.

Taking into account the factors outlined above, the School is planning for nearly static enrollment over the next three years, with 314 students in fall 2011 and a goal of 300 students in each of the following two years. This target enrollment has been determined to be optimal, both in terms of budget and current studio space per student. A strategic

space planning study is currently underway that will help the School determine future growth of its physical plant. Findings will balance the changing admissions environment with ongoing space needs for the graduate Architecture program, including faculty offices, exhibitions and critique space, and technology enhancement space.

I.2.5 INFORMATION RESOURCES

Institutional Context and Administrative Structure of the Library and Visual Resources

The Kenneth and Nancy Kranzberg Art & Architecture Library is one of the Washington University Libraries. The Art & Architecture librarian serves in an administrative capacity as head of the Art & Architecture Library. The Art & Architecture librarian is responsible for the Architecture program within the WU Libraries, and reports to the associate dean of University Libraries. Responsibilities include planning, designing, and directing the Art & Architecture Library to provide effective services to faculty, students, and staff of the Sam Fox School of Design & Visual Arts and the Department of Art History and Archaeology in the College of Arts & Sciences.

The Art & Architecture librarian and the subject librarian for Art & Architecture have professional degrees in librarianship and hold graduate degrees in art history. Librarians at Washington University are considered administrative staff. The librarians have management responsibility for the acquisitions budget and the student-hiring budget. Each year, the librarian has opportunities to request needed equipment and physical improvements; these are funded in competition with other library units. In recent years, these requests have been largely successful.

The three paraprofessional library assistant positions of student supervisor, collections manager, and reserves require a bachelor's degree or equivalent experience and three years of library public service experience. All positions have written descriptions. The Art & Architecture Library, with four-and-a-half full-time personnel, approaches the staffing of comparable institutions. Part-time student assistance provides routine library service, particularly during evening and weekend hours.

The Visual Resources Center, i.e., slide library, is housed adjacent to the Art & Architecture Library. It is primarily funded and directed by the Department of Art History and Archaeology, with additional funding from the Sam Fox School for special projects. The Visual Resources curator, who reports to the chair of the Department of Art History and Archaeology staffs the Center. There is also a full-time assistant curator of Visual Resources and student workers supervised by the curator.

Library and Visual Resources Collections, Services, Staff, Facilities, and Equipment

Content, extent, and formats represented in the current collection include number of titles and subject areas represented.

Art & Architecture Library Collection Numbers

	2010-11	2008-09	2006-07
Total of All Volumes in the Art & Architecture Library West Campus Art and Architecture Collection	109,114	105,891	103,814
Total of Volumes that have Library of Congress (Architecture) Classification	27,306	Not available	25,303
Art & Architecture Library Print and Electronic Journal Subscriptions	192	320	Not available
University Libraries Online Database Subscriptions	269	242	184
Total of Architecture Videos and DVDs	179	Not available	176

Its valuable print holdings and the access it provides to all the major art and architecture databases make the Art & Architecture Library the best of its kind in the region. The Library holds over 109,000 art and architecture volumes in various media including over 900 videos, DVDs, and CD-ROMs and almost 1,600 journal titles, and subscribes to the foremost electronic article indexes, e-book reference works, and digital image databases as well as lesser-known specialized electronic resources that support the research

needs of faculty. The digital image databases deliver through the Internet a critical mass of visual images for teaching and learning to all faculty and students. Through the University Libraries, Art & Architecture Library users have access to over 260 online databases to support interdisciplinary research. The Art & Architecture Library website helps users quickly find print and electronic resources and gives tips for searching effectively. The collections and access are planned to serve the needs of undergraduate and graduate students and faculty of the Sam Fox School and the Department of Art History and Archaeology.

Collection development is very much based on current programs and on the current needs of students and faculty. Faculty and students may suggest purchases in person, through e-mail, or by filling out a form on the Library's website. Some Sam Fox School departments have active faculty library liaisons, who advise in the development of the Library's collections. Subject librarians attend departmental and staff meetings to remain in close communication with faculty and to stay up-to-date on new areas of research and teaching.

First priority is given to requests for ordering new and retrospective materials to support course offerings and faculty research areas. Collection development is undertaken with active participation from the faculty who identify areas of the collection where growth is needed. In strategic planning meetings with faculty and administrators of the Sam Fox School and the Department of Art History and Archaeology, several areas of needed collection growth were identified. Areas of focused collection development since the time of the last accreditation report include non-western art and architecture, modern and contemporary art and design, and landscape and urban design.

The collection aims to support all of the curriculum areas of contemporary practice (including urban issues and landscape architecture), technology and sustainability (or the environment), history/theory, and computation and representation as the School's programs emphasize them. The Library will purchase whatever materials are needed to support programs and research. Using the North American Collections Inventory Project format to describe collection strengths based on classification, for architecture, intended "collecting intensity" ranges from "basic information level" (mainly for architecture of specific countries of lesser interest to the program) to "instructional support level—advanced" which support study at the graduate level. These assignments are appropriate based on the programs of the Graduate School of Architecture & Urban Design. Due to the age of the collection (established in 1905) and some valuable gifts over the years, retrospective holdings are good.

The Library does support faculty research. This is done based on current, individual faculty activities (as opposed to any attempt on the Library's part to provide universal coverage or anticipate future needs.)

Students and faculty also benefit from the Library's broad scope beyond architecture. Collections that support graduate and undergraduate programs in Art History and Studio Arts are heavily used by those in Architecture, giving a broader exposure and a more interdisciplinary experience. Art Special Collections is a 3,400 volume collection of rare and unique art and design printed materials located at the Art & Architecture Library. Art and design students have access to these primary sources as part of their curriculum through classroom visits to use special collections materials in the Library's seminar room. This collection continues to grow based upon the teaching and research needs of Sam Fox School faculty. In addition, separate libraries on campus in Business, Social Work, and Engineering provide strong support.

Evaluation

Librarians work with faculty to integrate the teaching of research skills in curriculum and assignments. During orientation week, the librarians meet with a majority of the incoming Art and Architecture undergraduate and graduate students. Throughout the semester, in-depth research instruction tailored to specific courses is offered in the Art & Architecture Library's seminar room or in a technology classroom in an adjacent building. Together, librarians and faculty develop sequential research process assignments that build research and critical thinking skills; plan hands-on sessions where students apply the skills with the help of faculty, librarians, and teaching assistants; and create web guides pointing students to library resources to use in completing research assignments.

Undergraduate Architecture students at Washington University acquire basic research and critical thinking skills in a required freshman-year general-education Writing I course. Knowing that students have already acquired these basic skills allows faculty and librarians to emphasize the next, intermediate competency level of discipline-specific skill sets with students in the architectural history courses. Research sessions with assignments are developed through collaborations between librarian, faculty member, and visual resources professional that require the students to model the research process during the course of executing a final project. This process asks the student to collect citations for books, articles, and images related to their project, following a research session that introduces resources such as article databases, reference sources, and image databases; justify the sources using evaluation criteria and annotation; and submit a bibliography to their instructor several weeks in advance of their final project.

Since the study of architecture also has an intrinsically visual component, when the assignment is appropriate the skill-building process is expanded to include evaluating and using digital image resources, as well as providing information on digital image production, and any other technologies that take into account how images will be used. This presents a natural opportunity to collaborate with and capitalize on the applied technologies instructional emphasis of the visual resources professional.

Some additional points at which students in the Architecture program are taught research and critical thinking skills include the new graduate students orientation; an in-depth research session for new international graduate students; and the Library Research Guide for the graduate Degree Project course.

The Art & Architecture librarians have promoted how they support the research and teaching needs of faculty and graduate students through the distribution of cards listing the many services they offer. Services include assistance with research, library instruction, copyright issues, and technical support. Research service by the subject librarian is provided onsite for the MFA students at the Lewis Center one afternoon per week during the academic year. Subject librarians are responsible for maintaining current research guides in their areas of architecture, art history, and studio arts. The subject librarians also create course-specific research guides to support classroom instruction. All faculty and students can expect expert reference service at their point of need, whether in person, or through email or live chat. In addition, library assistants are trained to provide basic assistance in finding and using information in the Art & Architecture Library. A collection of reference sources is shelved at the center of the Library, near the service desk. Internet, database, and catalog access are available in the same area. Also, the Library plans to have more media available for instructional settings—perhaps by facilitating the rental of video art, films, and animation for classroom viewing.

The Washington University Libraries have participated in LibQUAL+, the Association of Research Libraries' tool to survey faculty, students, and staff on library service quality. In 2004, 2007, and in 2010, an in-house Service Quality Survey of faculty and students was developed and administered. Regular assessment of Library services allows the WU Libraries system to continuously work to meet users' highest service level expectations. In survey results from 2010, faculty and students gave the Art & Architecture Library an overall satisfaction rating of 4.14 on a scale of one to five, where one equals very unsatisfied and five equals very satisfied.

The Art & Architecture Library is open a total of 80.5 hours a week during the school year. Access to the Library's catalog and all other electronic information sources is available through networked computers on site and remotely to faculty and students through the WU Libraries proxy server.

The Library provides twice daily paging of materials for the convenience of faculty and students. Information about the holdings of other libraries is also available through electronic access, and these materials can be obtained through interlibrary loan or document delivery services. The WU Libraries interlibrary loan and document delivery services are available to students and faculty, at no cost to the user. Users may request books from other WU libraries to be delivered for pick up at the Art & Architecture Library. As a member of the MOBIUS consortium of Missouri academic libraries, WU Libraries provides students and faculty quick processing of interlibrary loan requests. The Libraries' membership in the Article Reach partnership gives Art & Architecture Library users rapid electronic delivery of articles in portable document format (PDF). Students also have access (though not circulation privileges) to the extensive collection of the Saint Louis Art Museum's library.

WU Libraries offer permanent digital archiving of the theses and dissertations produced by graduate students in other Washington University Schools through the Electronic Theses and Dissertations (ETD) collection. The Libraries and the Graduate School of Architecture & Urban Design have plans to implement a procedure in the 2011-12 school year to collect digital files of Architecture graduate students' final design thinking books and their Degree Projects into the ETD system.

Books, videos, and DVDs on course reserve are available on request at the service desk and through Ares, Electronic Reserves. Ares provides faculty the opportunity to place readings on reserve in PDF. Twenty-four hour access to Ares has expanded access to reserve materials.

Quality, Currency, Suitability, Range, and Quantity of Resources

The Art & Architecture Library holds 192 current journal subscriptions. Coverage is good for Architecture with subscriptions to 87 percent of the titles listed on the *Core List of Architecture Periodicals* as set forth by the Association of Architecture School Librarians (AASL), as well as 36 percent of the titles identified as Supplementary by AASL. Retrospective holdings are good for major titles, with many complete or nearly-complete runs. The Library subscribes to the major Art and Architecture indexes: Art Index, Art Index Retrospective, Art Bibliographies Modern, and Avery Index to Architectural Periodicals. Additionally, the University Libraries support JSTOR and Project Muse, which include electronic holdings in Architecture.

The Library collects videos and electronic materials; it does not collect drawings, photos, models, or materials samples. Of the 847 videos and DVDs cataloged in the Library, 179 are architecture-related. Audio-visual materials circulate according to the same policies as books. For materials that do not circulate, the Library maintains a VCR/DVD player and monitor available for individual use as well as players and a projector in the Library's seminar room for group viewing.

The Washington University Libraries have been instrumental in purchasing and implementing two major digital image indexes to which architecture faculty and students have access. In 2003, the Luna digital image management system was implemented on campus. Luna provides access to numerous external digital image collections and provides a systematic approach to collecting and distributing internally generated digital image collections. Most notably, the WU Visual Resources Center collection of almost 55,000 digital images is available via Luna. The Visual Recsources Center's collection supports teaching and classroom image needs by making digital images available for viewing, downloading, and presentation in classrooms on the University campus.

In December 2004, the WU Libraries began subscribing to ARTstor which currently contains over 300,000 images classified as Architecture and City Planning.

Art & Architecture Library Facilities

In the summer of 2006, the Art & Architecture Library moved from Steinberg Hall (designed by Fumihiko Maki in the early 1960s) to a new 11,360 square foot space on the ground floor of the Mildred Lane Kemper Art Museum, also designed by Maki. The dean of WU Libraries was for a decade closely involved in the planning for the Sam Fox School. The design for the Kranzberg Art & Architecture Library grew out of that planning process. The L-shaped library runs along two sides of the courtyard in the middle of the Sam Fox School complex, conveniently accessible to all departments. The outside walls, almost all windows, bring in natural light. Current issues of journals and new books are displayed next to comfortable reading chairs. Reading room tables are wired for internet access and are designed as open work surfaces, both for small group collaborations and to accommodate oversized art books. The technology has been upgraded with more computers, wired and wireless network access, scanning capacity, and a VHS/DVD viewing station. A quiet study room for graduate students seats twenty. A seminar room with digital projector allows librarians to introduce small groups to the Library's print and electronic resources. The seminar room is also used for art and architecture critiques, and class viewings of videos and DVDs.

The Art & Architecture Library book collections are housed, for maximum capacity, in mobile sections of compact shelving, more than doubling the number of books an area can hold. The Library has 9,500 linear feet of shelf space, compared to 5,000 in the previous location. Offsite storage offers long-term shelving for lesser used materials. Roughly forty percent of the Library's less-used general and special collections are off-site at the West Campus Library. The off-site facility offers climate-controlled, secure storage, plus daily delivery service on weekdays and a pleasant study room. Including off-site facilities, storage and housing systems are sufficient and appropriate for most materials, although in Service Quality Surveys, faculty and students consistently comment on the difficulty of browsing for books due to the compact shelving.

Ayers Saint Gross consultants, in their space planning study of the Sam Fox School, provided comprehensive numbers regarding existing, short-term, and future needs. From this data, a fifteen percent growth in library space was anticipated to meet long-term need, which equates to growth from 8,939 ASF to 10,280 ASF. Planning continues as the Sam Fox School studies potential building sites for future use. It would certainly be true to say that the long-term needs of the Art & Architecture Library are being considered as part of these ongoing studies.

Funding to Enable Continuous Collection Growth

Acquisitions and endowment funding

	2010	2009	2008
Total Art & Architecture Library	$172,568	$168,562	$182,911
Architecture Monographs	$22,108	$23,500	$26,220
Architecture Continuations (Print Journals, Electronic Journals, Databases)	$19,700	$18,000	$22,865
Endowment and Gift Funds	$53,537	$45,613	$35,180

The Library's acquisitions policy is both responsive to current teaching and research needs of faculty and students as well as strategic in planning for future growth areas. An approval plan makes possible the acquisition of major art and architecture monographs from American and European publishers. Many other items are identified and selected by the subject librarians. In addition to books and periodicals, videos and digital formats are purchased, and the Library provides access to electronic sources through the Internet.

The Art & Architecture librarian can lobby for an increase or redistribution of funds, although there is no official role for subject librarians in the budget process. The librarian, who authorizes all expenditures from the acquisitions budgets, makes selection decisions. The Associate Dean of Collections and Departmental Libraries must approve requests for unique, one-time purchases, large ticket items, or new electronic subscriptions.

The Washington University Libraries are considered to be among several University-wide services. As such, funding for all WU Libraries comes from the payment of prorated funds by the Colleges and Schools within the University into the Central Fiscal Unit. Decisions about how these funds will be distributed are made by the executive vice chancellors and the provost. Of the total amount allotted for the WU Libraries, the Sam Fox School contributes seven percent.

The WU Libraries work as efficiently as possible—running a lean organization and making internal reallocations to meet new needs, as well as engaging in fundraising. Currently, endowment income accounts for ten percent of the University Libraries budget, with the rest coming from the Schools' prorations. The Libraries are identified as one of the major assets of the University and, more generally, there is broad recognition at Washington University that libraries are central to any top-tier research university. However, Library resources still lag behind the needs—and ranking—of the University. The University Libraries have been working on closing resource gaps to meet faculty needs, but simultaneously, are facing administrative budget cuts reflecting the global economic environment.

In order to bring faculty and the broader academic community into the higher-level discussions on the library budget and its effects, an ad hoc committee on Libraries in a Time of Constraint was appointed by the provost. The committee has three members from the Sam Fox School and it is co-chaired by a faculty member in Music and the dean of Washington University Libraries. This committee is proactively addressing numerous issues, including the rapidly escalating cost of library material, the need to adapt to a more digital environment, and the need to build awareness and emphasis on the development of library resources as new faculty are hired and the University moves into new scholarly and research directions.

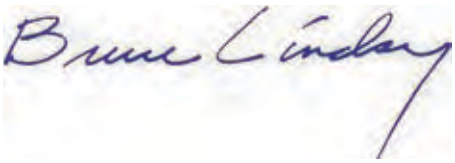
I.3 INSTITUTIONAL AND PROGRAM CHARACTERISTICS

I.3.1 STATISTICAL REPORTS

I.3.2 ANNUAL REPORTS

Dean Jerry Sincoff filed NAAB reports and responses for 2006 and 2007. These reports are appended here. Reports and responses for 2008, 2009 and 2010 are also appended here; these were filed from my office. The staff of the College & Graduate School of Architecture & Urban Design provided both Dean Sincoff and myself with the data recorded in these reports.

To the best of knowledge, all data submitted to the NAAB through the Annual Report Submission system by Dean Sincoff and myself is accurate and consistent with reports sent to other national and regional agencies including the National Center for Education Statistics.



Bruce Lindsey, AIA
Dean, College & Graduate School of Architecture & Urban Design
E. Desmond Lee Professor for Community Collaboration

2007 NAAB STATISTICAL REPORT

SCHOOL: **Washington University in St Louis** completed by Jerome J. Sincoff, FAIA, Dean

ACSA REGION: EC NE SE SW **WC**

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	202					59	91
Part-Time Students	0					0	0
FTE Students	202					59	91
Arch Design Studio Students	87					57	90
Students Working Part-Time	25					18	17
Outside Stud. Serv. by Dept.	60						
African-American Students	5					1	1
Native American Students*	0					0	0
Asian/Pacific Isle Students	15					2	5
Hispanic Origin Students	10					2	5
Women Students	123					17	44
Foreign Students	10					13	7
Total Degrees Awarded	70					28	20
Grads. Fin. Estab. No. Yrs.	66					23	18
Degrees Awarded Women	28					7	14
Degrees Awarded Afri-Amer	3					0	0
Degrees Awarded Amer. Ind.	0					0	0
Degrees Awarded Asi/Pac. Isl.	2					0	1
Degrees Awarded Hispanics	2					0	1
Min Req. SAT/ACT/GRE Score	N/A					N/A	N/A
Number of Applicants	666					107	98
Number Accepted	206					84	89
Enrollment Target/Goal	60					29	37
Student Studio/Faculty Ratio	undergraduates:		89/14 = 6.36				
	graduates	152/19 = 8.0			combined: 241/33 = 7.3		

*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	15,378
Total Architecture Collection in Departmental Library	15,378
University Library LCNA or 720-729 Collection	9,615
Total Architecture Collection in University Library	24,993
Departmental Library Architecture Slides	55,878 + 5095 digital images
University Library Architecture Slides	55,878 + 5095 digital images
Departmental Library Architecture Videos	176
Staff in Dept. Library	5
Number of Computer Stations	75 classroom computers for teaching. Also, each student has their own lapt
Amount Spent on Information Technology	$222,587
Annual Budget for Library Resources	$146,000
Per-Capita Financial Support Received from University	$0 (We operate as a reserve school; each school within the University is fi
Private Outside Monies Received by Source	$320,350
Studio Area (Net Sq. ft.)	18,000 sq. ft.
Total Area (Gross Sq. ft.)	44,328 sq. ft.

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SCHOOL:_____ Completed by:_____

FULL-TIME FACULTY SALARIES	Number	Minimum	Average	Maximum	Univ. Avg.
Professor	5	$80,000	$100,000	131,000	_____
Associate Professor	6	$70,000	$73,417	$77,500	_____
Assistant Professor	6	$60,000	$63,933	$66,000	_____
Instructor					

FACULTY DATA	Department Total
Full-Time Faculty	17
Part-Time Faculty	43
Full-time Equivalent (FTE) Faculty	31.18
Tenured Faculty	10
Tenure-Track Positions	8
FTE Administrative Positions	12.6
Faculty Engaged in Service to Comm.	20
Faculty Engaged in Service to Univ.	17
FT Faculty who are U.S. Licensed Registered Architects	12
PT Faculty who are U.S. Licensed Registered Architects	15
Practicing Architects	40
FTE Graduate TAs	16
FT Faculty Avg. Contact Hrs/Wk	10.2
PT Faculty Avg. Contact Hrs/Wk	4.87

NO. FULL-TIME FACULTY CREDENTIALS

Ph.D.	4
D. Arch	0
M.A. or S.	4
Prof. M. Arch	5
B. Arch	1
Post Prof. Masters	0
Other	5

	FT	PT	Tenured	Prof.	Assoc.	Assist.
African-American Faculty	0	0	0	0	0	0
Native American Faculty*	0	0	0	0	0	0
Asian/Pacific Island Faculty	1	3	0	0	0	0
Hispanic Origin Faculty	2	3	2	1	0	1
Women Faculty	7	8	1	0	1	4

*Include Eskimos and Aleuts

Washington University in St. Louis
2007 NAAB Annual Reports
June 1, 2007

Part 2 – Responses to Deficiencies listed in VTR dated July 21, 2006

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 in the NAAB 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 student of how to access the NAAB Conditions for Accreditation.

VTR: Both the APR and the School of Architecture Graduate Programs Catalog of 2005-2006 contain an outdated "NAAB Statement". The "NAAB Statement published by the School of Architecture does not include the Doctor of Architecture as a recognized accredited degree program. The balance of the catalog is clear and informative.

Program response: The 2007 bulletin of the Graduate School of Architecture & Urban Design, published January 1, 2007, includes the following statement:

"In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards. Master's degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

The NAAB grants candidacy status to new programs that have developed viable plans for achieving initial accreditation. Candidacy status indicated that a program should be accredited within 6 years of achieving candidacy, if its plan is properly implemented."

13.25 Construction Cost Control
Understanding of the fundamentals of building cost, life-cycle cost, and construction estimating.

VTR: Understanding of the fundamentals of building cost, life-cycle costs, and construction estimating is not sufficiently addressed. While the idea of the architect's responsibility for cost estimating is mentioned in professional practice, there is not opportunity for the student to develop an understanding of the process and its impact on project costs or risk or at least not evident in the team room materials. While energy consumption is addressed in the Climate and Lighting course, the broader fundamentals of life-cycle cost are not addressed or at least not evident in the team room materials.

Program response: Since the team visited in April 2006, the required Professional Practice course for all Master of Architecture students has added an entire section on this subject presented by a construction cost estimator who covers conceptual cost estimating, design development estimating, final construction document estimating and bidding. Budget evaluation and life-cycle costing are discussed as considerations in project component selections.

Part 3 – Response to Cause(s) for Concern in VTR dated July 21, 2006

The team is still concerned about the well-being of the tenure-track faculty. It found the same concern that the previous visiting team observed:

> *A somewhat veiled issue that is affecting the spirit, productivity, professional and personal well-being among the tenure-track faculty. While they fully recognize the value of change within the curriculum and actively support the School's direction in many ways, there is a perception of political pressures coming from the tenured faculty that may have a very negative impact on their ability to progress within the program as teachers, scholars and creative individuals. There appears to be little collective interest in the constructive role of mentorship by some of the tenured faculty, and the atmosphere has become highly politicized. In combination with the issues identified as concerns under Condition II.6 – Human Resources and II.7 – Human Resource Development, these are serious issues that deserve attention, careful consideration, "investment" and constructive measures by the faculty and School administration.*

Program response: Two things have been accomplished in response to this concern:

The faculty have developed and adopted a mentoring program for Tenure Track Faculty. In consultation with the tenure track faculty member the program assigns a faculty member to help with mentoring. In addition two other mentors may be included from outside the college and or outside the university to provide [perspective and advice. The faculty mentor will help the faculty member in preparation of yearly review material, as well as provide assistance in preparing mid-review and tenure submission materials.

The Sam Fox School of Design and Visual Arts faculty in concert with Deans Colangelo, Lindsey, and Pike have written a new Promotion and Tenure Guideline document that is in the final stages of editing and approval. It will be in place for the fall term of 2007. This document will clarify criteria for tenure and promotion as well as codify and formalize the mentoring program for all faculty. This should provide a clear and consistent foundation for both the faculty's work towards tenure and the review process that will be used for evaluation.

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clear and consistent foundation for both the faculty's work towards tenure and the review process that will be used for evaluation.

I.3.3 FACULTY CREDENTIALS

See faculty resumes Appendix 2, and 1.2.1 Faculty Credentials Matrix

Andrew Cruse: Required Design Studios, Required Technology Course
Registered Architect, National Council Architectural Registration Board, LEED AP
An experienced award-winning architect most recently as an associate at Machado and Silvetti Associates in Boston. Cruse has taught at Northeastern University, the Rhode Island School of Design, and the Boston Architectural College. He was a Fulbright Scholar in Barcelona.

Gia Daskalakis: Urban Issues Elective
A practicing architect with extensive experience with work across planning, landscape architecture, architecture and furniture design. Her book seminal book (2001) *Stalking Detroit* co-authored with Jason Young and Charles Waldheim set forward early ideas around the development of landscape urbanism.

Kathryn Dean: Required Design Studios
Registered Architect, American Institute of Architects
Professor Dean maintains an award winning practice Dean Wolf Architects in New York City. A recently published monograph *Dean / Wolf Architects Constructive Continuum* (2010) published by Princeton Architectural Press written by Kathryn outline their recent work. This past year she has been the recipient of a New York State AIA Honor Award and a New York City Honor Award. She has taught at Columbia University, City University of New York, University of Michigan, University of Virginia, Harvard, and the University of Florida.

Paul Donnelly: Required Studios, Required Technology Course
Rebecca and John Voyles Professor of Architecture, Registered Architect, Registered Engineer, Fellow American Institute of Architects, American Society of Civil Engineers, Architectural Engineering Institute, Chi Epsilon, National Civil Engineering Honor Society, US Green Building Council.
Professor Donnelly is a practicing and licensed engineer and architect. Paul is the recipient of an ACSA distinguished professor award (2007), and an NCARB creative research award.

Benjamin Fehrmann: Required Design Studios, Required Design Thinking Course
Mr. Fehrmann maintains an award winning practice. His work ranges from residential projects through public art installations.

Iain Fraser: History Theory Electives, Urban Issues Elective
Licensed architect
Professor Fraser has practiced in Toronto, London, Raleigh (North Carolina), and St. Louis. As a sculptor, his work has been exhibited in group and one person shows. Together with Rod Henmi, he is the author of *Envisioning Architecture: An Analysis of Drawing*.

Catalina Freixas: Required Design Studios
Registered Architect, Buenos Argentina, LEED AP, US Green Building Council
A practicing architect she worked for a number of years with Forum Architects in St. Louis and currently is principal in Laulab in St. Louis.

Carolyn Gaidis: Urban Issues Elective
Registered Landscape Architect, American Society of Landscape Architects, International Society of Arboriculture Certified Arborist, US Green Building Council, Urban Land Institute, Associate American Institute of Architects
Ms. Gaidis is a practicing landscape architect, arborist with experience in the sustainable sites initiatives of the ASLA. She currently works with the design and planning firm H3.

Patty Heyda: Required Design Thinking Course, Urban Issues Electives
LEED AP, Urban Land Institute,
Assistant Professor Heyda has experience in practice as both an architect and urban designer with HOK, Chan Krieger Associates, and Jean Novel in Paris. Portions of her project called *Roman Operating System_2000*, conducted with Rem Koolhaas at Harvard University, were included in the *Mutations* show focusing on emerging models of urbanism at the Arc en Reve Centre d'Architecture in Bordeaux, France. Patty has taught at Harvard GSD and Northeastern University.

John Hoal: Required Design Studios, Urban Issues Electives
South African Institute of Architects, South African Council of Architects, American Institute of Certified Planners, Institute of Urban Design Fellow, International Association for Public Participation, National Charrette Institute, The Natural Step Sustainability Planning Process, Form-Based Code Institute American Planning Association,
Associate Professor Hoal was Director of the Mayor's Institute on City Design for the Midwest. From 1993-2000, he was the Director of Urban Design for the City of St. Louis, during which time he directed numerous major projects. He is the founding principal of the design and planning firm H3 Studio, and one of five firms selected to lead the Unified New Orleans Plan.

Derek Hoeferlin: Required Design Studios, Required Design Thinking Course
Registered Architect, National Council Architectural Registration Board
Derek Hoeferlin is a licensed architect and urban designer with his own practice,
Assistant Professor Hoeferlin is a senior architect and urban designer at H3 Studio, Inc. of St. Louis; and a collaborator with Waggonner & Ball Architects of New Orleans. Derek and his Washington University students have collaborated and continue to collaborate with multiple groups on citizen-led projects in New Orleans, including the University of Toronto Master of Landscape Architecture department in an effort titled Gutter to Gulf.

Eric Hoffman: Required Design Studios, Required Technology Course
Registered Architect, LEED AP, American Institute of Architects, National Council Architectural Registration Board, US Green Building Council
Visiting Assistant Professor Hoffman has extensive experience in practice including work with Herzog & de Meuron on the Walker Art Center and currently as HOK's design liaison for the Saint Louis Art Museum (SLAM) expansion with David Chipperfield Architects.

Philip Holden: Required Design Studios
Registered Architect, National Council Architectural Registration Board
Mr. Holden has extensive practice experience and currently is principle with Holden Architects. His project for Virtual Reality Enterprises recently won a St. Louis AIA Interiors honor award.

Dorothée Imbert: History Theory Elective
Professor Imbert practiced landscape architecture at Peter Walker and Partners from 1996 until 1999, and subsequently taught at Harvard University for ten years before joining the faculty at Washington University. She has carried out extensive research on

landscape modernism with an emphasis on Europe and California, leading to the books *Between Garden and City: Landscape Modernism and Jean Canneel-Claes* (University of Pittsburgh Press, 2009), *The Modernist Garden in France* (Yale University Press, 1993), and *Garrett Eckbo: Modern Landscapes for Living* (with Marc Treib, University of California Press, 1996, 2005).

Christof Jantzen: Required Design Studios
I-CARES Professor of Sustainability, AIA, LEED AP
Professor of Practice Jantzen is a partner of Behnisch Architekten headquartered in Stuttgart, Germany, and has since grown into a fully independent firm with offices in Munich, Boston, and Los Angeles. Christof runs the firms LA office.

George Johannes: Required Professional Practice Course
Registered Architect, American Institute of Architects,
George has extensive experience in practice and depth in project management and project delivery.

Sung Ho Kim: Required Design Studios, Required Design Thinking Course
RIBA Parts I & II
Associate Professor Kim's has extensive experience in practice, research, and tecahing. He was a principal researcher for Krzysztof Wodiczko's Interrogative Design Group at the Center for Advanced Visual Studies at MIT. He is currently Design Principal of Axi:Ome LLC of St. Louis. Two monographs about Axi:Ome—*Spatial Practice* (Oro Editions) and *Specular: Between Practice and Education* (Damdi Architecture Publishing Co.)—were published in 2009.

Don Koster: Required Design Studios
Registered Architect, LEED AP, American Institute of Architects, National Council Architectural Registration Board, US Green Building Council
Mr Koster is a practicing architect and educator. He has received numerous honors for both academic and professional work, including the AIA School Medal and multiple AIA Awards in Architecture. He maintains an independent architecture practice, Donald Nelson Koster Architect, based in St. Louis.

Stephen Leet: Required Design Studios, History Theory Electives
Registered Architect
Professor Leet has extensive practice experience including work with I.M. Pei & Partners, as well as in private practice with Bower Leet Architects. His most recent book, *Richard Neutra's Miller House* (Princeton Architectural Press, 2004), won awards for graphic design and editorial merit.

Zeuler Lima: Required Design Studios, Urban Issues Elective
CRE-SP Brazil, Brazilian Architecture Council, Society of Architectural Historians, Latin American Studies Association, Advisory Board for Modern Architecture in Latin America, exhibition MoMA, NY, 2013 Advisory Board for Art, Architecture, and Culture in Brazil, exhibition, Newark Museum, NJ, 2015. Associate Professor Lima has extensive experience in practice, scholarship, and teaching. He was one of the four partners of Projeto Paulista de Arquitetura office in São Paulo and won several distinguished national architecture and landscape architecture competitions and awards in Brazil. Lima was the recipient of the prestigious 2007 International Bruno Zevi Prize for architecture history and criticism and several national and international research grants.

Bruce Lindsey: Urban Issues Elective
E. Desmond Lee Professor for Community Collaboration Registered Architect, American Institute of Architects, Board member US Green Building Council, Board member Downtown Partnership, ST. Louis, Associate member American Society of Landscape Architects
Dean Lindsey has extensive experience in practice and education. Lindsey worked with Davis + Gannon Architects to design the Pittsburgh Glass Center, which earned a gold rating under LEED guidelines. The project also received a Design Honor Award from the American Institute of Architects (AIA) and was chosen as one of 2005's top 10 green buildings by the AIA's Committee on the Environment.

Adrian Luchini: Required Design Studios, Required Design Thinking Course
Raymond E. Meritz Professor, Registered Architect Argentina, American Institute of Architects, Sociedad Central de Arquitectos Argentina, Consejo Professional de Arquitectura e Ingenieria de Cordoba
Professor Luchini is an internationally recognized architect who has practiced in Argentina and the United States, and whose projects have been published in *A&U*, *Casabella*, *Domus*, *Quaderns*, *Progressive Architecture*, and other journals. A monograph of his work from Rockport Publishing, part of the Contemporary World Architects series, was published in 2000.

Peter MacKeith: Required Design Studios, Required History Theory Course, History Theory Electives
Associate Professor MacKeith has extensive experience in practice and teaching in Finland and the United States. Additionally his scholarship and writing has been recognized and published around the world. MacKeith is the recipient of a Fulbright Fellowship and research grants from The Graham Foundation for Advanced Studies in the Visual Arts, and is active in both the ACSA and the EAAE. In 2008, he received a Creative Achievement in Design Education Award from the Association of Collegiate Schools of Architecture (ACSA).

Igor Marjanovic: Required Design Studios, History Theory Electives
North American Society for Serbian Studies, Society of Architectural Historians,
Associate Professor Marjanovic is a practicing architect, scholar, and award winning educator. He earned a national Education Honor Award from the American Institute of Architects (AIA) for his studio class offered as part of the Sam Fox School's Florence Summer Program. Together with Katerina Ruedi Ray, Marjanovic co-authored three books including *Marina City: Bertrand Goldberg's Urban Vision* (Princeton Architectural Press).

Robert McCarter: Required Design Studios, History Theory Electives
Ruth & Norman Moore Professor, Registered Architect, National Council Architectural Registration Board, International Editorial Board, Alvar Aalto Academy, Society of Architectural Historians, Advisory Board, Sarasota Architectural Foundation,
Professor McCarter is a practicing architect and widely acclaimed scholar and teacher. His recent scholarship includes: *Louis I. Kahn* (Phaidon Press, London, 2005); *On and By Frank Lloyd Wright: A Primer of Architectural Principles* (Phaidon Press, London, 2005). He currently has a number of books and publications at press and continues to publish extensively about contemporary architectural practice.

Pablo Moyano: Required Design Studios, Required Design Thinking Course
Licensed Architect Buenos Aires, LEED AP, Sociedad Central de Arquitectos, Buenos Aires
Mr. Moyano a practicing architect, worked for a number of years with Forum Architects in St. Louis and currently is principal in Laulab in St. Louis.

Eric Mumford: Required History Course, History Theory Electives
Society of Architectural Historians, Landmarks Association,
Professor Mumford is a licensed architect and an internationally acclaimed architectural and urban design historian. He is the author of *The CIAM Discourse on Urbanism, 1928-1960* (MIT Press, 2000), the only book-length history of the International Congress of Modern Architecture. His recent book *Defining Urban Design: CIAM Architects and the formation of a discipline, 1937-69* was published by Yale University press. Mumford was a Visiting Associate Professor in the Department of Art and Architecture at Harvard University and is a member of the GSD's board of overseers.

Winifred Elysse Newman: Required History Course, Required History Theory Course, History Theory Electives
Society of Architectural Historians, Van Alan Institute, History of Science Society, Cognitive Neuroscience Society
Visiting Assistant Professor Newman is a practicing architect and scholar and published extensively in the area of the history of science. She recently completed her PhD at Harvard's GSD with her dissertation titled: "Physiological Psychology and the Discourse on Representation in Fin-de-Si'ecle Germany."

James Scott: Required Professional Practice Course
Missouri Bar 1976-present, Fellow American College of Construction Lawyers, former chair, ABA Forum on the Construction Industry, National Roster of Construction Neutrals, American Arbitration Association, Advisory Board, Woman Owned Contractor
James is an Officer in the Construction Law Practice Group and has more than thirty years of experience advising engineers, architects, contractors, design-builders and construction managers on all facets of project delivery, ranging from initial consulting through start-up and project close-out.

R. Phillip Shin: Required Technology Courses
Professional Engineer
Phil is a licensed structural engineer with extensive experience in practice and teaching. Phil maintains an active consulting practice in St. Louis.

Ken Tracy: Required Design Studios, Required Design Thinking Course
Visiting Assistant Professor Tracy is a founding partner of yo_cy design with Christine Yogiaman. Based in St. Louis, yo_cy is currently designing projects in Indonesia with a focus on combining local craft with digital fabrication techniques. Tracy has taught at Pratt Institute's Graduate School of Architecture, Columbia University, and the New Jersey Institute of Technology's School of Architecture.

Heather Woofter: Required Design Studios, History Theory Elective
Registered Architect, RIBA Parts I & II
Associate Professor Woofter has worked as an architect and project manager for Bohlin Cywinski Jackson in Wilkes-Barre, Pennsylvania; Marks Barfield in London, United Kingdom; and Luchetti & Associates in Cambridge, Massachusetts. She is currently architect and design principal at Axi:Ome LLC of St. Louis with Sung Ho Kim. Two monographs about Axi:Ome — *Spatial Practice* (Oro Editions) and *Specular: Between Practice and Education* (Damdi Architecture Publishing Co.) — were published in 2009.

Christine Yogiaman: Required Design Studios, Required Representation Courses
Assistant Professor Yogiaman is a practicing architect and has worked with Dean/Wolf Architects in New York on numerous projects, including the Queens Hospital Emergency Medical Services Station, which was honored with an award for excellence in design by New York City's Art Commission in 2006. She is a founding partner of yo_cy design with

Ken Tracy based in St. Louis which is currently designing projects in Indonesia with a focus on combining local craft with digital fabrication techniques.

I. 4 POLICY REVIEW

All relevant University, Sam Fox School, and Graduate School of Architecture policies, as specified in *2009 NAAB Conditions for Accreditation, Appendix 3,* will be available in the NAAB Accreditation team room.

PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM

II. 1 STUDENT PERFORMANCE CRITERIA

Narrative Overview of Curricular Goals

The Master of Architecture program focuses on the critical role of architects in society and culture. The School has a strong history of practice-based education that has been expanded to include depth in issues of sustainability and digital design since the last accreditation.

Fundamental to the graduate curriculum is the architectural design studio sequence. This rich educational dialogue is intimate and immediate, with one faculty member for every 12 students. Informing and enriching the studio experience for students in the Master of Architecture program are courses in architectural history and theory, building technology and sustainability, landscape design, urban design, professional practice, and digital media studies. Throughout the core sequence, the required courses are coordinated with the studio curriculum. Great emphasis is placed on a student's ability to integrate and synthesize the information in these courses in the design studio.

Core Semesters

The three-semester core sequence for students in the seven-semester M.Arch 3 program focuses on building a foundation for the practice of architecture. Students are expected to acquire a general disciplinary knowledge base; an understanding of, and ability to exercise, the design process; agility in the use of the various forms of representation and presentation; and the ability for discernment and critical thought.

The core sequence also emphasizes the development of a strong work ethic (consistency and intensity) through discipline, rigor, perseverance, resourcefulness, and continual experimentation. The core sequence provides basic skills and knowledge, but also inspires passions, provokes new modes of thinking, sparks creativity, and builds confidence. The three design core studios are carefully sequenced to build on knowledge and skills from one to the other and to incrementally reach greater levels of complexity through the engagement of broader frameworks.

The first core studio (317) serves as an introduction to the design process through a series of abstracted exercises. The first problem works from an initial premise of material and tectonic abstraction. In the second problem, this abstraction is deployed as a horizontal datum that creates an abstract play structure for an urban park. The final project of the semester looks at the city as theater, developing fully volumetric propositions for an abstracted urban theater on a corner site. Architectural Representation I and Digital Visualization Workshop I develop the students' two-dimensional graphic skills, while Concepts and Principles supports critical thinking in the studio exercises.

The second core studio (318) increases the level of complexity for the students and places great attention on landscape, climate, and sustainability. Projects are set in three different landscapes: the hot and arid Arizona desert, the hot and humid Mississippi marsh, and the temperate St. Louis meadow and forest. Students analyze natural structures to understand their relationship to each landscape and their response to that climate. Environmental Systems I provides a technical framework that supports the studio by addressing topography and grading of the site as well as the passive strategies of sun and wind orientation for the building. Simultaneously, Architectural Representation II and Digital Visualization II give the students support for the three-dimensional computer skills that are integrated into this design studio.

The third core studio (419) works with a medium-scaled housing project to synthesize more complex and diverse criteria. Students who have completed the first-year core studios are joined by students admitted to our five-semester M.Arch 2+ program. The students investigate the spatial opportunities, social aspects, and technical requirements that are necessary for working in a challenging urban context. Building Systems I supports the studio work by providing an understanding of the wall section in relation to the vertical urban street wall as well as the complex systems of accessibility, vertical transportation, and fire egress required for larger projects. Digital Visualization Workshop III focuses on the rendering of interior and exterior space to aid the students in developing the presentation skills that will be necessary throughout the rest of their education and career.

Advanced Options Semesters

Upon completion of the core sequence, students progress into the three-semester, advanced options studio sequence. Students admitted to the School's four-semester M.Arch 2 program enter directly into the advanced studios sequence, joining students from the M.Arch 3 and M.Arch 2+ programs. A broad range of offerings are presented to the students, who rank their choices in a lottery system. These studio offerings range from classic modern architectural topics, to studios focusing on sustainability and other more experimental studies. As part of this diversity, students must take at minimum of one comprehensive studio. The advanced studios are offered by the School's permanent faculty and by renowned visiting professors.

In the advanced options studio sequence, students tailor their education to their own interests. The initial concepts introduced in the core sequence are nurtured. Students may choose to specialize in sustainability, urban architecture, landscape relationships, or technical concerns. Some students choose a more experimental path that might include a fabrication studio. To make this specialization possible, students can take one studio from the offerings in Urban Design, Landscape, Fabrication, or Design/Build, allowing them to expand their understanding of related fields. All students are expected to understand the intimate relationship between architecture, place, and culture.

Advanced International Semesters

To enhance this understanding of culture, students are allowed to take up to two international studios. As part of the School's advanced curriculum, our international programs offer semester-long studios and support courses in Helsinki, Finland (spring semester); Buenos Aires, Argentina (fall semester); and Seoul, South Korea (fall semester), as well as a summer term curriculum in Barcelona, Spain. The locations are chosen for many reasons: these countries have capitals that are among the most important in the world; their complex cultures reflect explicitly the combination of tradition with technological variation, social diversity, and various modes of craft. The density of these cities is unparalleled, providing urban experiences not available in the Midwest. In addition, these cities' distances from North America, their urban designs – bearing different characteristics from those found locally – and the degree of intensity with which their inhabitants use them, all enhance students' perceptions of the city (as a general construct) as a cultural artifact where architecture is a fundamental component of its identity.

To be sensitive to both the local and global realities of every location is more pertinent today than ever. The relationships between landscape, light, material, and culture teach our students to be sensitive to nuance and allow them to work more responsibly as professionals and citizens. In all of our programs abroad we hope to achieve a similar goal: to expand our students' education, to enrich their perception, and to instill a deep comprehension of architectural reality in the 21st century.

In each of the international opportunities, instruction is in English and the instructors are part of the School's faculty, familiar with the expectations and the quality of the School's students. These international semesters are strongly encouraged for all students; tuition and living expenses are held at the same level as for semesters in St. Louis and scholarships for travel expenses are available. M.Arch 2 and M.Arch 2+ students can realistically incorporate one international semester in their curriculum while M.Arch 3 students can consider two of the three advanced semesters abroad.

Comprehensive Studio I

During the advanced options studio sequence, students are required to take one comprehensive studio to prepare them for the intensive work in the final Degree Project semester.

The role of the comprehensive options studio is to expand the students' abilities from an abstract design language to a tactile material engagement. The focus of the studio is a strong design experimentation that is implemented in a highly resolved architectural project. Students must develop structure and material systems, as well as appropriate design responses to climate and energy use demonstrated through plans, interior and exterior elevations, and models at appropriate scales. Building and/or wall sections and/or models will be at a minimum of ¼" or 1:50 scale. This studio should provide the process and skills that will allow for expanded development in the Degree Project.

Final Semester Degree Project

The independent character of a student's abilities that is developed through their personal trajectory through the advanced options studios is demonstrated and tested in the final semester through the Degree Project. The graduate Degree Project provides a strong closure to the student's advanced study in architectural design studios. Through the Degree Project, all students in their final semester in the professional degree programs have the opportunity to test and challenge their capacity to initiate and develop design proposals and to carry through a design project that they have formulated independently. This intensity is accomplished by maintaining 10 students for every faculty member.

This final Degree Project consists of two parts. The first is a preparatory phase in the penultimate semester during which the students take the class Design Thinking. Their goal for that semester is to establish a conceptual framework for their proposal, to formulate a program, to select a site, and to establish a material and/or spatial desire for their work in the final semester. The students produce a book that documents their site and program but, as importantly, conveys both the conceptual and the architectural frameworks for their projects.

The second part consists of a design studio in the student's final semester in which the project considered in Design Thinking is undertaken. Degree Project students work under the leadership of designated Degree Project faculty. Technical reviews begin just after mid-semester. Students develop a critical section of their projects for this review. The ultimate goal is for each student to develop clear design principles, strong technical resources, and an independent, critical position relative to other contemporary practices on the making of architecture in the world. Final reviews with invited guest critics from around the country are held to evaluate each student's work.

MArch 3 Program
Student Performance Criteria

Required Courses

		Performance Criteria	Ability *Communication Skills*	Ability *Design Thinking Skills*	Ability *Visual Communication Skills*	Ability *Technical Documentation*	Ability *Investigative Skills*	Ability *Fundamental Design Skills*	Ability *Use of Precedents*	Understanding *Ordering Systems Skills*	Understanding *Historical Traditions and Global Culture*	Understanding *Cultural Diversity*	Understanding Applied Research	Ability *Pre-Design*	Ability *Accessibility*	Ability *Sustainability*	Ability *Site Design*	Ability *Life Safety*	Ability *Comprehensive Design*	Understanding *Financial Considerations*	Understanding *Environmental Systems*	Understanding *Structural Systems*	Understanding *Building Envelope Systems*	Understanding *Building Service Systems*	Understanding *Building Materials and Assemblies*	Ability *Collaboration*	Understanding *Human Behavior*	Understanding *Client Role in Architecture*	Understanding *Project Management*	Understanding *Practice Management*	Understanding *Leadership*	Understanding *Legal Responsibilities*	Understanding *Ethics and Professional Judgment*	Understanding *Community and Social Responsibility*
			A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	C1	C2	C3	C4	C5	C6	C7	C8	C9
Required Design Studios	**AR 317**	ARCHITECTURAL DESIGN I (M.ARCH 3)	●	●	●		●	●	●	●			●																					
	AR 318	ARCHITECTURAL DESIGN II (M.ARCH 3)	●	●	●		●	●	●	●	●	●	●			●	●				●						●							
	AR 419	ARCHITECTURAL DESIGN III	●	●	●		●	●	●	●	●	●	●	●	●	●	●	●	•	•	●	●				●	●	•					●	●
	AR 511	ARCHITECTURAL DESIGN V	●	●	●		●	●	●	●	●	●	●														●						●	●
	AR 512	ARCHITECTURAL DESIGN VI	●	●	●		●	●	●	●	●	●	●														●					•	●	●
	AR 611	ARCHITECTURAL DESIGN VII (comprehensive option)	●	●	●	•	●	●	●	●	●	●	●		●	●	●	●	●		●	●	●	●	●	●	●						●	●
	AR 616	DEGREE PROJECT	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●		●	●	●	●	●		●				•	•	●	●
			A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	C1	C2	C3	C4	C5	C6	C7	C8	C9
Required Courses	**AR 323A**	ARCHITECTURAL REPRESENTATION I	●	●	●																													
	AR 323B	ARCHITECTURAL REPRESENTATION II	●	●	●																													
	AR 408A	DIGITAL VISUALIZATION WORKSHOP I			●																													
	AR 408B	DIGITAL VISUALIZATION WORKSHOP II			●																													
	AR 408C	DIGITAL VISUALIZATION WORKSHOP III			●																													
	AR 339	CONCEPTS AND PRINCIPLES	●				●				●	●	●													●	●								
	AR 4283	ARCHITECTURAL HISTORY I	●				●				●	●	●														●								
	AR 4284	ARCHITECTURAL HISTORY II	●				●				●	●	●														●								
	AR 438	ENVIRONMENTAL SYSTEMS I				•				●				●	●	●	●				●		●	●	●									
	AR 449	ENVIRONMENTAL SYSTEMS II				•								●		●					●		●	●	●									
	AR 447A	STRUCTURES I	●	●		•	●															●			●	●		●				●	●	
	AR 447B	STRUCTURES II	●	●		●	●															●			●	●		●				●	●	
	AR 346	BUILDING SYSTEMS	•		•	●			●				•		•			•			•	●	●	●	●	●		•	•	•	•	•		
	AR 538C	ADVANCED BUILDING SYSTEMS	•	•	•	•	•		●				●			●			•		●	●	●	●	●	●		•		•	•	●		
	AR 580	DESIGN THINKING: RESEARCH AND DESIGN	●	●	●		●		●		●	●	●	●					•								●							
	AR 646	PROFESSIONAL PRACTICE	●			•	•		●									•		●						●	●	●	●	●	●	●	●	●

• Topic Introduced
● Topic Covered

MArch 3 Program
Student Performance Criteria

Required Electives:
History / Theory (6 units required)
Urban Issues / Landscape (3 units required)

		Performance Criteria	Ability *Communication Skills*	Ability *Design Thinking Skills*	Ability *Visual Communication Skills*	Ability *Technical Documentation*	Ability *Investigative Skills*	Ability *Fundamental Design Skills*	Ability *Use of Precedents*	Understanding *Ordering Systems Skills*	Understanding *Historical Traditions and Global Culture*	Understanding *Cultural Diversity*	Understanding Applied Research	Ability *Pre-Design*	Ability *Accessibility*	Ability *Sustainability*	Ability *Site Design*	Ability *Life Safety*	Ability *Comprehensive Design*	Understanding *Financial Considerations*	Understanding *Environmental Systems*	Understanding *Structural Systems*	Understanding *Building Envelope Systems*	Understanding *Building Service Systems*	Understanding *Building Materials and Assemblies*	Ability *Collaboration*	Understanding *Human Behavior*	Understanding *Client Role in Architecture*	Understanding *Project Management*	Understanding *Practice Management*	Understanding *Leadership*	Understanding *Legal Responsibilities*	Understanding *Ethics and Professional Judgment*	Understanding *Community and Social Responsibility*
			A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	C1	C2	C3	C4	C5	C6	C7	C8	C9
History/Theory Electives	**A46 421P**	BERTRAND GOLDBERG: MARINA CITY	●		●		●			●	●		●															●			●		●	
	A46 464A	ARCHITECTURE AND PHOTOGRAPHY	●	●	●		●				●																							
	A46 471A	CONTINUITY AND TRANSFORMATION	●		●		●			●	●	●	●														●							
	A46 484C	METABOLIC CITY	●	●	●		●		●	●	●	●	●														●							●
	A46 522C	COLLECTIVE FORM AND THE VERNACULAR	●				●			●	●	●	●																					
	A46 527G	KAHN AND AALTO: CRITICAL STUDIES	●	●	●		●			●	●	●	●														●							●
	A46 527N	LINA BO BARDI: DESIGN AT AN IMPASSE	●	●	●		●		●	●	●	●	●													●								
	A46 527Q	CONTEMPORARY NORDIC ARCHITECTURE	●				●			●	●	●															●							●
	A46 528M	ARCHITECTURAL ASSOCIATION	●				●				●	●	●																		●		●	
	A46 528P	CONTEMPORARY CRITICAL REGIONAL PRACTICES	●		●		●			●	●	●	●													●	●				●		●	●
	A46 565C	ARCHITECTURE, PHOTOGRAPHY AND FILM	●	●	●		●				●																●							
	A46 567C	CONTEMPORARY CRITICAL GLOBAL PRACTICES	●		●		●			●	●	●	●													●	●				●		●	●
	A46 570	HISTORY OF LANDSCAPE ARCHITECTURE, 1850 - 1970	●				●			●	●	●	●																					
	A46 575	PAINTING INTO ARCHITECTURE	●		●		●			●	●	●	●													●	●						●	
	A46 4782	MODERN ARCHITECTURE IN ST. LOUIS	●				●				●	●	●													●					●			●
			A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	C1	C2	C3	C4	C5	C6	C7	C8	C9
Urban Issues Electives	**A46 454**	PUBLIC SPACE AND CITY LIFE	●	●	●		●		●		●	●	●													●	●						●	●
	A46 455A	URBAN BOOKS	●	●	●	●	●		●	●		●	●																					
	A46 471A	CONTINUITY AND TRANSFORMATION	●		●		●			●	●	●	●														●							
	A46 525K	LAND ARCH URB	●	●	●		●		●		●	●	●													●	●						●	●
	A46 564A	URBAN DEVELOPMENT SEMINAR	●	●	●		●					●	●							●						●	●	●		●	●	●	●	●
	A46 564J	SUSTAINABILITY IN THE BUILT ENVIRONMENT	●	●	●		●		●		●	●	●													●	●						●	●
	A46 652	METROPOLITAN DEVELOPMENT	●	●	●		●			●		●								●						●	●	●	●	●	●	●	●	●
	A46 654D	METROPOLITAN LANDSCAPES	●	●	●	●	●		●	●	●	●	●			●	●				●					●	●							●
	A46 656	METROPOLITAN URBANISM	●	●	●		●			●	●															●	●						●	●
	A46 657	CONTEMPORARY PRACTICES IN SUSTAINABLE URBANISM	●	●	●		●		●		●	●	●													●	●						●	●

II.2 CURRICULAR FRAMEWORK

II. 2. 1 REGIONAL ACCREDITATION

The North Central Association of Colleges and Schools is the accreditation agency for Washington University in St. Louis. The last PEAQ Comprehensive Evaluation took place in 2004-2005. The University was awarded a ten-year term of accreditation. The next PEAG Comprehensive Evaluation will be in 2014-2015. Details can be found online at the following web link.

II. 2. 2 PROFESSIONAL DEGREES AND CURRICULUM

The Graduate School of Architecture & Urban Design offers the following professional and post-professional degrees:

The Master of Architecture degree is an accredited first professional degree for students with either an undergraduate degree in architecture or an undergraduate degree in non-architectural studies.

The seven semester M.Arch 3 (105 semester credits) program forms the basis of the accredited graduate program. Students are considered for selective advanced placement into the School's four semester M.Arch 2 (60 semester credits) and five semester M.Arch 2+ (75 semester credits) programs, if they have strong backgrounds in architectural studies (for example, a B.S. in Architecture). The School reserves the right to place students at the level the Admissions Committee deems appropriate, based on portfolio evaluation, transcript evaluation and overall preparation for the intensity of the design curriculum (see section II.3).

All M.Arch degree program sequences are constructed on the foundation of 45 (or more) semester credit hours of general (non-architecture) studies accomplished through the Undergraduate degree; demonstration of this is an admissions requirement and is reviewed as part of program admissions.

The Master of Science in Advanced Architectural Design is a post-professional degree for individuals with a professional degree in architecture accredited by the National Architectural Accreditation Board (NAAB) who are interested in pursuing opportunities in research, teaching, and independent studies.

The Master of Science in Architectural Studies is a post-professional degree that provides students the opportunity to engage in research specialization or focus beyond that possible within the professional degree programs.

The Master of Landscape Architecture degree focuses on design, ecology, and urbanism. It leads to a professional degree in three years with the option of advanced placement for students with a design undergraduate degree.

The Master of Urban Design degree is a post-professional degree focused on issues of the metropolitan landscape for those holding professional degrees in architecture, landscape architecture, or planning.

MArch, MSAAD and MSAS, Master of Landscape Architecture, and Master of Urban Design degrees can be combined with study in other divisions at Washington University in St. Louis, leading to dual degrees in Architecture, Landscape Architecture, and Urban Design and a Master of Business Administration, Master of Social Work, or Master of Construction Management.

The Graduate School does not offer any minors or concentrations outside these degree programs.

PROFESSIONAL DEGREE CURRICULA (M.Arch 3, 2+, 2)

M.Arch 3 (105 credits)

Year 1	fall	Architectural Design I [317]	6	
		Architectural Representation I	3	
		Concepts and Principles	3	
		Architectural History II	3	
		Digital Visualization I	1	16 credit hours
	spring	Architectural Design II [318]	6	
		Architectural Representation II	3	
		Architectural History I	3	
		Environmental Systems I	3	
		Digital Visualization II	1	16 credit hours
Year 2	fall	Architectural Design III [419]	6	
		Structures I	3	
		Building Systems I	3	
		Architectural or General Elective	3	
		Digital Visualization III	1	16 credit hours
	spring	Architectural Design IV [511]	6	
		Structures II	3	
		Environmental Systems II	3	
		History/Theory Elective	3	15 credit hours
Year 3	fall	Architectural Design V [512]	6	
		Advanced Building Systems	3	
		History/Theory Elective	3	12 credit hours
		Architectural or General Elective	3	
	spring	Architectural Design VI [611]	6	
		Design Thinking	3	
		Professional Practice	3	
		Architectural or General Elective	3	15 credit hours
Year 4	fall	Degree Project [616]	6	
		Urban Issues Elective	3	
		Architectural or General Elective	3	12 credit hours
		total credit hours		105

M.Arch 2+ (75 credits)

The M.Arch 2+ curriculum is a five-semester course of studies. Students are considered for placement in the M.Arch 2+ curriculum based on design portfolio evaluation and the extent of their undergraduate architectural studies shown on their transcripts. Placement in this curriculum is highly selective (see II.3). Students entering at this level are those students with strong backgrounds that the faculty felt need reinforcement of conceptual building skills and/or context relationship skills—the skills that Architectural Design III (419) excels at developing.

Year 1	fall	Architectural Design III [419]	6	
		Environmental Systems I	3	
		Structures I	3	
		History/Theory Elective	3	
		Digital Visualization III	1	16 credit hours
	spring	Architectural Design IV [511]	6	
		Structures II	3	
		Environmental Systems II	3	
		Architectural or General Elective	3	
		Architectural Workshop*	1	16 credit hours
Year 3	fall	Architectural Design V [512]	6	
		Advanced Building Systems	3	
		History/Theory Elective	3	
		Architectural or General Elective	3	
		Architectural Workshop*	1	16 credit hours
	spring	Architectural Design VI [611]	6	
		Design Thinking	3	
		Urban Issues Elective	3	
		Architectural or General Elective	3	15 credit hours
Year 4	fall	Degree Project [616]	6	
		Professional Practice	3	
		Architectural or General Elective	3	12 credit hours
		total credit hours		75

M.Arch 2 (60 credits)

This four-semester program is for strong design students holding baccalaureate degrees in Architecture (B.S. in Architecture typically). Placement in this curriculum is highly selective (see II.3). It begins with a series of closely related fundamental courses leading to more advanced elective work and the Degree Project. This program leads to a professionally accredited Master of Architecture degree.

Year 1	fall	Architectural Design IV [511]	6	
		Environmental Systems 1	3	
		History/Theory Elective	3	
		Architectural or General Elective	3	15 credit hours
	spring	Architectural Design V [512]	6	
		Environmental Systems II	3	
		Structures II	3	
		Urban Issues Elective	3	15 credit hours
Year 2	fall	Architectural Design VI [611]	6	
		Design Thinking	3	
		Advanced Building Systems	3	
		Architectural or General Elective	3	15 credit hours
	spring	Degree Project [616]	6	
		Professional Practice	3	
		History/Theory Elective	3	
		Architectural or General Elective	3	15 credit hours
		total credit hours		60

Graduate International Semesters/ GENERAL OUTLINE

Students

Students are upper level graduate students. They have either had a four-year undergraduate degree in architecture and one semester of residence within the School or they have a undergraduate degree in another field and have completed our three semester core curriculum. Maximum number of students is 24; minimum 10-12. If a studio is oversubscribed, preference is given to more experienced students or those with the higher GPA.

Choice of Location

We send students to urban centers that have dynamic architectural communities and where there are examples of both fine historic and contemporary buildings. Each city has a unique set of political and social circumstances that affect architectural practice.

Curriculum

Studio – 6 credits. A building project in the city responding to the physical and social fabric of the place – students are upper level graduate students who are expected to carry the project to a high level of resolution

History – 3 credits. History of architecture in the region or country

Building Systems 2 – 3 credits. Examination of local and regional building methods with emphasis on integration of systems of structure, enclosure, climate and light.

Urban Issues or Theory Seminar – 3 credits

Faculty
Faculty are local architects and historians who are appointed and compensated directly by the School. They will develop a syllabus for each course based on the needs and standards of the Graduate School of Architecture of the Sam Fox School of Design and Visual Arts. The Director of Graduate International Programs works with the hired faculty to develop the syllabus for the courses.

Coordinator
Each location has a coordinator – not necessarily an architect – who introduces the students to the city and the country, helps them settle into daily life in an unfamiliar place and arranges studio travel.

Location
We rent space – the space can be within another University or another institution. Given the independent schedule of classes, reviews and lectures, and, equally important, the fact that our students tend to work during regular business hours and also at night and on weekends, we prefer to have a studio space accessible 24hours a day, 7 days a week. When necessary, we provide access keys to all our students so they can enter the premises at their discretion. We also seek, if possible, a location close to their place of residence so as to facilitate their ability to work in studio at all times.

Apartments
Students share apartments – and we assist with the finding of the apartments. They are typically rented for the duration of the semester (4 months) and are furnished so as to allow the students to cook their meals.

Travel
Each studio typically takes one trip with one or two faculty – travel expenses for the studio faculty are reimbursed. Students also of course travel on their own. The trip takes a week and it is planned and arranged between the Director of Graduate International Programs and the faculty.

Expectations
Students are expected to work hard; they also are ambassadors for the School and are expected to be sensitive and respectful of cultural norms. They will operate with the same standards of expectation and Code of Conduct applicable to Washington University. This Code of conduct will also apply to the hired faculty.

Duration
These programs take place during the regular academic year (Fall and Spring Semester) for a total of 16 weeks, normally coordinated with the general Academic Calendar established by Washington University; or during the summer months of June and July, in which case they go for 8 weeks.

II. 2. 3 CURRICULUM REVIEW AND DEVELOPMENT

A Curriculum Committee oversees all curricula issues within the College of Architecture and the Graduate School of Architecture & Urban Design, including the new degree program of Landscape Architecture. The Curriculum Committee is made up of full-time tenured and tenure-track faculty members appointed by the Dean. The Committee includes registered architects and senior faculty members familiar with NAAB Conditions for Accreditation.

In addition to the representative faculty members appointed by the Dean, the committee includes the Director of the Undergraduate Program, the Director of the Graduate School, and the chairs of programs in Architecture, Urban Design and Landscape Architecture. The Dean appoints the Chair of the Curriculum Committee on a yearly basis.

The Committee meets six to eight times a semester and establishes its agenda and schedule at the outset of each semester. The agenda is determined by a consensus of the Committee in consultation with the faculty, and is based on an ongoing review of the School's curriculum and current issues in professional practice. Any faculty member is welcome to put forth an issue for consideration by the Committee. The final agenda for each semester is forwarded to the faculty and all faculty are invited to participate in committee meetings.

If the Committee supports a curricula change by a majority vote, the proposal is then brought to the faculty as a whole. Proposals are put forth for a First Reading at the faculty meeting, following the Curriculum Committee's vote. The chair of the Committee will typically present the proposal to the faculty for consideration and discussion. As a follow-up to the faculty's review, the committee will consider the faculty's input, make adjustments to the proposal if the committee agrees by consensus, and bring the proposal to the faculty for its Second Reading and a vote. All curricula changes related to either structure or content must be approved by a majority vote of the faculty.

II.3 EVALUATION OF PREPARATORY/PRE-PROFESSIONAL EDUCATION

The Graduate Programs in Architecture and Urban Design in the Sam Fox School of Design and Visual Arts at Washington University offer accredited professional Master of Architecture degrees for students both with pre-professional undergraduate degrees in Architecture (B.A. or B.S. in Architecture, B.Des in Architecture, etc., as well as architecture degrees achieved in schools outside the United States) and without undergraduate degrees in architecture (i.e. degrees in other majors, disciplines, and subject areas). The curricula for all the Master of Architecture degree programs are framed around the requirements for the seven semester, 105 credit M.Arch 3 program. The M.Arch 3 curriculum is organized for those who have had little to no previous formalized education in architecture or for those whose previous architecture studies—especially in design—do not met the standards for design achievement set by the faculty.

The Graduate Admissions Committee selectively grants advanced placement into either the M.Arch 2+ program (75 credits, five semesters) or M.Arch 2 program (60 credits, four semesters) for candidates with pre-professional or international degrees in architecture whose design work and representational/technical skill is demonstrated through the portfolio to have met specific design criteria for these advanced design sequences. Additionally, these advanced placement students must satisfy the relevant basic coursework in architectural history/theory (two semester survey sequence, one semester theory course), structures (one semester for MArch 2 standing) and building technologies (one semester Building Systems), initially through transcript review and subsequently through course material review. Relevant instructors review support coursework to verify that students who receive advanced placement have fulfilled the accreditation criteria met by our history sequence, structures sequence, and technical coursework. In each case, applicants must provide syllabi, textbooks, exams and additional assignments as requested.

In response to the 2009 requirements set forth by NAAB for verifying the standards of evaluation of pre-professional accomplishment in design and other coursework, entering Fall 2011 candidates will have forms completed and included in their academic files that document the approvals for advanced placement in design as well as approval of waivers in other required coursework.

II.4 PUBLIC INFORMATION

II.4.1 STATEMENT ON NAAB-ACCREDITED DEGREES

The following statement is printed in the 2011 Bulletin of the Graduate School of Architecture and Urban Design, as well as located and identified on the Sam Fox School website.

National Architectural Accrediting Board (NAAB) Statement of Conditions of Accreditation

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a six year, three year, or two year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

Washington University in St. Louis offers the following NAAB-accredited degree programs:
M.Arch 3 (pre-professional degree + 105 credits required)
M.Arch 2+ (pre-professional degree + 75 credits required)
M.Arch 2 (pre-professional degree + 60 credits required)

The professional Architecture program was last accredited in 2006. Next accreditation visit for all programs: 2012.

II.4.2 ACCESS TO CONDITIONS AND PROCEDURES

Included on the Sam Fox School website, under the listings of the Master of Architecture programs, are PDF versions of the following:
The 2009 NAAB Conditions for Accreditation/ The NAAB Procedures for Accreditation

II.4.3 ACCESS TO CAREER DEVELOPMENT INFORMATION

Included on the Sam Fox School website, under the listings of the Master of Architecture programs, are links or PDF versions of the following:
www.ARCHCareers.org
The NCARB Handbook for Interns and Architects (PDF)
Toward an Evolution of Studio Culture (PDF)
www.epcompanion.org
www.NCARB.org
www.aia.org
www.aias.org
www.acsa-arch.org

II.4.4 PUBLIC ACCESS TO APRs and VTRs

Copies of the following documents are available to the public in the Kranzberg Art and Architecture Library (Kemper Museum building) reference section, under the call numbers NA2127. S3, as well as in PDF versions here.

All annual reports, including the narrative
All NAAB responses to the Annual Report
The final decision letter from the NAAB
The most recent APR (2005-06)
The final edition of the most recent Visiting Team Report, including attachments and addenda

II.4.5 ARE PASS RATES

A link to the NCARB website and ARE Pass Results for Washington University in St. Louis is available to students, faculty, staff, parents, and the general public from the Sam Fox School website, under the listings for the Master of Architecture program.

PART THREE (III): PROGRESS SINCE THE LAST SITE VISIT

III.1 RESPONSES TO TEAM FINDINGS

A. Responses to Conditions Not Met

i.
From the 2005-2006 Visiting Team Report, page 6, I.4.3, Conditions Not Met, Public Information:

"both the APR and the School of Architecture Graduate Programs Catalog of 2005-2006 contain an outdated "NAAB Statement." The "NAAB Statement published by the School of Architecture does not include the Doctor of Architecture as a recognized accredited degree program. The balance of the catalog is clear and informative."

Program response: The current edition of the bulletin of the Graduate School of Architecture & Urban Design, published April 2011, includes the following statement, in accordance with the approved NAAB text.

National Architectural Accrediting Board (NAAB)
Statement of Conditions of Accreditation

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

ii.
From the 2005-2006 Visiting Team Report, page 19, 13.25, Conditions Not Met, Construction Cost Control:

"Understanding of the fundamentals of building cost, life-cycle costs, and construction estimating is not sufficiently addressed. While the idea of the architect's responsibility for cost estimating is mentioned in professional practice, there is not opportunity for the student to develop an understanding of the process and its impact on project costs or risk of at least not evident in team room materials. While energy consumption is addressed in the Climate and Lighting course, the broader fundamentals of life-cycle cost are not addressed or at least not evident in the team room materials."

Program Response: Since the team visited in April 2006, the required Professional Practice course for all Master of Architecture students has added an entire section on this subject presented by a construction cost estimator who covers conceptual cost estimating, design development estimating, final construction document estimating and bidding. Budget evaluation and life-cycle costing are discussed as considerations in project component selections.

While not required, the school has developed two elective professional practice courses: Advanced Professional Practice, and Project Design Realization. Both these courses further cover estimation with the latter course requiring a full cost estimate as part of the final project.

B. Responses to Causes of Concern

From the 2005-2006 Visiting Team Report, page 2, item 5: Causes of Concern

"The team is still concerned about the well-being of the tenure-track faculty. It found the same concern that the previous visiting team observed:

A somewhat veiled issued that is affecting the spirit, productivity, professional and personal well-being among the tenure-track faculty. White they fully recognize the value of change within the curriculum and actively support the School's direction in many ways, there is a perception of political pressures coming from the tenured faculty that may have a very negative impact on their ability to progress within the program as teachers, scholars and creative individuals. There appears to be little collective interest in the constructive role of mentorship by some of the tenured faculty, and the atmosphere has become highly politicized. In combination with the issues identified as concerns under condition II.6 – Human Resources and II.7 – Human Resource Development, these are serious issues that deserve attention, careful consideration, "investment" and constructive measures by the faculty and School administration".

Program response: Two things have been accomplished in response to this concern:

Upon appointment in 2006, the Dean of the Sam Fox School moved swiftly to work with faculty to address this concern. The Sam Fox School of Design & Visual Arts new Promotion and Tenure Guideline document was approved by the faculty in fall 2007 and is in its third full year of implementation. This document has clarified criteria for tenure and promotion and formalizes the mentoring program for all faculty. There is a Sam Fox School mentoring committee that oversees the mentor programs for architecture and art providing important oversight and further program development. The committee is currently working on issues relating to increasing diversity within both school's faculties. Architecture's Tenure and Promotion Committee is now carefully guided and structured in its processes.

Architecture's faculty mentoring program is in its third full year where each non-tenured faculty member is given two faculty mentors. Faculty mentors meet with the faculty at least one per semester. In addition one of the mentors visits one of the mentees courses and gives feedback as to teaching effectiveness, course organization and structure.

III.2 RESPONSES TO CHANGES IN NAAB CONDITIONS

The 2009 Conditions for Accreditation are not significantly different from those in effect at the time of the last accreditation visit. More specifically, the changes impact the organization of conditions rather than their content. In most cases, therefore, the program has adapted its current responses to the current organization of conditions (for example, student performance criteria, Part II.1). Where this is not the case, present conditions make explicit what previous conditions implied. In these cases, such as with strategic planning, studio culture, and advanced placement, the program has taken measures to more specifically address what is more explicitly required (see Parts I.1 and II.3).

PART FOUR (IV): SUPPLEMENTAL INFORMATION

IV.4 COURSE DESCRIPTIONS

IV.5 FACULTY RESUMES

IV.6 VISITING TEAM REPORT FROM LAST VISIT

IV.7 CATALOG/ URL FOR GRADUATE BULLETIN

IV.4.4 Course Descriptions

ARCHITECTURE 317 - ARCHITECTURAL DESIGN I (M.Arch 3)

6 credits **FALL 06, 07, 08, 09, 10, 11**

Course Description:

This Graduate 1st semester core studio allows students to develop design sensibility through making and thinking. Project 01 develops tectonic and spatial skills, Project 02 develops scale, function and program skills, and Project 03 develops urban, precedent and basic architectural design skills.

Course Goals & Objectives:

- Critical Thinking
- Imagination
- Design Process
- Physical Modeling
- Manual Drawing
- Digital Drawing
- Spatial Design
- Tectonics
- Scale
- Program

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.7. Use of Precedents
A.8. Ordering Systems Skills
A.11. Applied Research

Topical Outline:

Conceptual Skills	20%
Design Skills	40%
Drawing and Representation Techniques	20%
Presentation Skills	20%

Prerequisites:

None

Textbooks/Learning Resources:

None

Faculty:

Sung Ho Kim, Associate Professor, Coordinator
Catalina Freixas, Senior Lecturer
Christine Yogiaman, Assistant Professor

ARCHITECTURE 318 – ARCHITECTURAL DESIGN II (M.Arch 3)

6 credits **SPRING 09, 10, 11**

Course Description:

The second semester core studio further develops spatial expression through a project sited in a natural landscape. Students uncover geometric principles in natural and manmade systems in order to negotiate between the inherent beauty of their site and the organizing principles of their project. The studio works with three sites of varying climates to differentiate building form and logics of climatic response. The studio aims to promote environmentally sustainable sensibilities.

Course Goals & Objectives:

- Develop spatial expression from landscape and logic of program; discover geometric principles in natural and manmade systems. Investigate patterns that influence a sectional response to the site and structure.
- Work with varying climatic conditions to differentiate appropriate responses of form. Criteria of light, air, water, and parameters of density, porosity, perimeter and enclosure inform the project.
- Consider the program to define the potentials of collective space, strategies of multiplication and spatial logic.
- Explore the specificity of materials to coalesce issues of program, site and environmental considerations.
- Construct reiterative models, digital and analog, to refine design process.
- Move between detail, landscape and building scale to emphasize the totality of the design.

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.7. Use of Precedents
A.8. Ordering Systems Skills
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research
B.3. Sustainability
B.4. Site Design
B.8. Environmental Systems
C.2. Human Behavior

Topical Outline:

Conceptual Skills	20%
Design Skills	60%
Drawing and Representation Technique	10%
Presentation Skills	10%

Prerequisites:

Successful completion of the 317 studio.

Textbooks/Learning Resources:

Olgyay, Victor, Design with Climate. Princeton: Princeton University Press, 1963.

Faculty:

Heather Woofter, Coordinator, Associate Professor
Igor Marjanovic, Associate Professor
Christine Yogiaman, Assistant Professor

ARCHITECTURE 419 – Architectural Design III (M.Arch 3; M.Arch 2+)

6 credits **FALL 08, 09, 10, 11**

Course Description:

Following 5 weeks of research including housing precedents, site analysis, readings + field trips, each student designs a collective housing project with approximately 30 dwelling units.

Course Goals & Objectives:

The 419 housing studio advocates urban density over dispersal through the design of collective housing that examine ways to recuperate vacated areas of the city. As preparation for the option studios, by the end of the semester each student's work is required to have successfully developed a thoroughly resolved and represented design for urban housing.

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.7. Use of Precedents
A.8. Ordering Systems Skills
A.9. Historical Traditions & Global Culture
A.10. Cultural Diversity
A.11. Applied Research Skills
B.1. Pre-Design Skills
B.2. Accessibility Skills
B.3. Sustainability Skills
B.4. Site Design Skills
B.5. Life Safety Skills
B.8. Environmental Systems
B.9. Structural Systems
C.1. Collaboration
C.2. Human Behavior
C.8. Ethics & Professional Judgment
C.9. Community and Social Responsibility

Topical Outline:

Research: housing precedents, site analysis, readings, field trip (2008 & 09: Los Angeles contemporary housing) housing workshop (2010: Julie Eizeneberg, William Moorish, Donnie Schmidt) 30%
Housing Design 70%

Prerequisites:

317 and 318 Architecture Studios or acceptance into M.Arch 2+ program.

Textbooks/Learning Resources:

Fall 2010 Course reserve books
Fall 2009 required textbooks:
Floor Plan Manual: Housing, and *Key Urban Housing of the Twentieth Century* + Course reserve books

Faculty:

Fall 2010
Stephen Leet, Professor, Coordinator
Jenny Lovell, Assistant Professor, Co-Coordinator
Andrew Cruse, Visiting Assistant Professor
Don Koster, Senior Lecturer
Ben Fehrmann, Lecturer
Pablo Moyano, Lecturer
Don Koster, Senior Lecturer

Fall 2009
Stephen Leet, Professor, Coordinator
Ian Caine, Lecturer
Ben Fehrmann, Lecturer
Derek Hoeferlin, Senior Lecturer
Paul Lukez, Visiting Professor,
Ken Tracy, Visiting Assitant Professor
Jenny Lovell, Assistant Professor
Pablo Moyano, Lecturer

ARCHITECTURE 511, 512, 611 – Architectural Design V, VI, VII - Comprehensive

6 credits **FALL AND SPRING 06, 07, 08, 09, 10, 11**

Course Description:

In the Options Studio Sequence, students are required to take one Comprehensive Studio. The role of the Comprehensive Options Studio is to expand the students' abilities from an abstract design language to a tactile material engagement. The focus of the studio should be strong design experimentation that is implemented in a highly resolved architectural project.

Course Goals & Objectives:

Students must develop structure and material systems, as well as appropriate design responses to climate and energy use demonstrated through plans, interior and exterior elevations, and models at appropriate scales. Building and/or wall sections and/or model will be at a minimum of ¼" or 1:50 scale. This should provide the process and skills which will allow for expanded development in the Degree Project.

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.7. Use of Precedents
A.8. Ordering Systems Skills
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research Skills
B.2. Accessibility
B.3. Sustainability
B.4. Site Design
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
C.2. Human Behavior
C.8. Ethics and Professional Responsibility
C.9. Community and Social Responsibility

Topical Outline:

Conceptual Skills	20%
Design Skills	40%
Technical Skills	30%
Presentation Skills	10%

Prerequisites:

317, 318, 419 Architecture Studios or acceptance into M.Arch 2 program.

Textbooks/Learning Resources:

Specific references are given as needed—ranging from building types to construction details.

Faculty:

Paul Donnelly, Rebecca & John Voyles Professor,
Robert McCarter, Ruth and Norman Moore Professor, Adam Yarinsky, Visiting Professor,
Manuel Bailo + Rosa Rull, Ruth and Norman Moore Visiting Professor,
Gerardo Caballero, Lecturer Abroad, Don Koster, Senior Lecturer,
Eric Hoffman, Senior Lecturer, Christof Jantsen, I-CARES Professor of Practice,
Jared Della Valle & Andy Bernheimer, Visiting Professor, Zeuler Lima, Associate Professor,
Brian Healy Ruth and Norman Moore Visiting Professor,
Wendell Burnette, Visiting Professor, Stephen Leet, Professor,
Andrew Metter, Visiting Professor

ARCHITECTURE 511, 512, 611 – Architectural Design IV, V, VI

6 credits **FALL and SPRING 06, 07, 08, 09, 10, 11**

Course Description:

A broad range of offerings ranging from classic modern architectural studies, to esteemed visiting practicing architects, and more experimental studios are presented to the students who rank their choices in a lottery system. As part of this diversity, students must take a comprehensive studio. To enhance their understanding of culture, students are allowed to take up to two international studios. To expand their understanding of related fields, they can take one studio from the offerings in Urban Design, Landscape, Fabrication, or Design/Build.

Course Goals & Objectives:

In the Options Studio Sequence, students tailor their education to their own interests. The initial interests introduced in the core are nurtured. Students may choose to specialize in sustainability, urban architecture, landscape relations, or technical concerns. Some students choose a more experimental path that might include a fabrication studio. All students are expected to understand the intimate relationship between architecture, place, and culture.

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.7. Use of Precedents
A.8. Ordering Systems Skills
A.9 Hist. Traditions and Global Culture
A.10 Cultural Diversity
A.11. Applied Research Skills
C.2. Human Behavior
C.8. Ethics and Professional Judgment
C.9. Community and Social Responsibility

Topical Outline:

Conceptual Skills	20%
Design Skills	40%
Presentation Skills	20%

Prerequisites:

317, 318, 419 Architecture Studios or acceptance into M.Arch 2 program.

Textbooks/Learning Resources:

Specific references are given as needed—they range from specific building types to specific construction details.

Faculty:

Kathryn Dean, Professor and Director of the Graduate School of Architecture,
Heather Woofter, Associate Professor and Chair of the Graduate School of Architecture,
Dennis Crompton, Visiting Professor, Carl Safe, Professor Emeritus,
John Hoal, Associate Professor and Chair of Urban Design,
David Ruy, Ruth and Norman Moore Visiting Professor, Marcelo Spina, Visiting Professor,
Derek Hoeferlin, Senior Lecturer, Weil Arets, Ruth and Norman Moore Visiting Professor,
Adrian Luchini, Raymond E. Maritz Professor of Architecture,
Sungho Kim, Associate Professor, Ken Tracy, Visiting Assistant Professor, Heather Roberge, Visiting Professor, Ferda Kolatan, Visiting Professor,
Catalina Freixas, Senior Lecturer, Martin Felson and Sarah Dunn, Visiting Professors,
Paul Lukez, Visiting Professor, Toru Hasegawa & Mark Collins, Visiting Professors

Philip Holden, Senior Lecturer, Rocio Romero, Visiting Professor

ARCHITECTURE 616 – Degree Project Studio

6 credits **FALL and SPRING 06, 07, 08, 09, 10, 11**

Course Description:

A design studio in which each student develops an independent, critical position on the making of architecture in the world translated into a comprehensive architectural design project including development of program spaces, relationships, structural and environmental systems, building envelope systems, life-safety issues, technical construction sections and assemblies, along with experiential renderings and a focus on telling a critical project story.

Course Goals & Objectives:

The main objective of the course is to engage a current, real condition of contemporary culture. Students must exhibit a high level of critical thinking and develop a project that is exploratory, projective, or unexpected in some important way in the realm of architecture beyond the project itself. Each student is devoted to the development of all aspects of the project aiming at creating a clear, full, and persuasive presentation for the work.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.4. Technical Documentation
A.5. Investigative Skills
A.6. Fundamental Design Skills
A.7. Use of Precedents
A.8. Ordering Systems Skills
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research Skills
B.1. Pre-Design
B.2. Accessibility
B.3. Sustainability
B.4. Site Design
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 & Assemblies
C.2. Human Behavior
C.8. Ethics and Professional Judgment
C.9. Community and Social Responsibility

Topical Outline:

Conceptual Skills	20%
Design Skills	30%
Technical Skills	30%
Presentation Skills	10%
Technical Documentation	10%

Prerequisites:

Arch 580 Design Thinking, and completion of 317, 318, 419, 511, 512, and 611 Architecture Studios or equivalent.

Textbooks/Learning Resources:

Specific references are given as needed—they range from specific building types to specific construction details.

Faculty:

Kathryn Dean, Co-Coordinator, Professor and Director of Graduate School of Architecture
Adrian Luchini, Co-Coordinator, Raymond E. Maritz Professor of Architecture
Heather Woofter, Associate Professor and Chair of Graduate Architecture
Jenny Lovell, Assistant Professor, Andrew Cruse, Visiting Assistant Professor,
Sung Ho Kim, Associate Professor, Eric Hoffman, Visiting Assistant Professor
Phillip Holden, Senior Lecturer

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

ARCHITECTURE 323A - Architectural Representation I

3 credits **FALL 06, 07, 08, 09, 10, 11**

Course Description:

This course examines the history/theory and practice of representation, specifically the systems of drawing used in architecture. The objective is to develop the requisite discipline, accuracy, and visual intelligence to conceptualize and generate a relationship between space and form. We will see that, rather than a translation of reality, representation operates between perception and cognition as a transcription of reality and is thus a powerful instrument in the design and making of architecture. The relationship between the drawing forms and the tools used to produce them are brought into focus as manual, digital, photographic and physical applications driven by drawing intentions. The course is organized as a lecture/lab with emphasis on practice of manual and photographic applications.

Course Goals & Objectives:

The course focuses on two concurrent tasks: first to outline and analyze the historical development of representational logics and their impact on architectural ideation, and second to explain the codification and usage of specific geometries, including orthographic and isometric projection, central and parallel perspective, and architectural axonometric.

Student Performance Criterion Addressed:

A.1. Communications Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills

Topical Outline:

Project 1 “TRANSFORMATIONAL GEOMETRY”	20%
Project 2 “CONTOURING COMPLEX SURFACES”	30%
Project 3 “MAPPING AND DIAGRAMMING”	50%

Prerequisites:

Concurrent registration in the 317 Architectural Design studio.

Textbooks/Learning Resources:

Evans, Robin, *Translations from Drawing to Building and Other Essays*, MIT Press, 1997, Paperback. Ching, Francis D. K, *Design Drawing,* Wiley, 1997, Paperback

Faculty:

Fall 2010	Christine Yogiaman, Assistant Professor, Coordinator Forest Fulton, Visiting Assistant Professor Kelley Van Dyke, Lecturer
Fall 2009	Derek Hoeferlin, Senior Lecturer, Coordinator Christine Yogiaman, Visiting Assistant Professor Kelley Van Dyke, Lecturer

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Sam Fox School of Design & Visual Arts
Washington University in St. Louis

ARCHITECTURE 323B – Architectural Representation II

3 credits **SPRING 06, 07, 08, 09, 10, 11**

Course Description:

The course examines the practice of representation, specifically the systems of digital computing used in architecture. The objective is to develop the requisite discipline, accuracy, and visual intelligence to conceptualize and generate a relationship between space and form. We will see that, rather than a translation of reality, representation operates between perception and cognition as a transcription of reality and is a powerful instrument in the design and making of architecture.

Course Goals & Objectives:

The semester will focus on three aspects of computing: Geometry Manipulation; Parametric Thinking; Simulating the Hyper Real. Each aspects of the course produce distinct descriptive drawings. The relationship between drawing and the digital tools used to produce them are brought into focus by drawing intentions.

Student Performance Criterion Addressed:

A.1. Communications Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills

Topical Outline:

Project 1 “GEOMETRY MANIPULATION, TECHNIQUES OF FABRICATION.”	30%
Project 2 “RESPONSIVE RELATIONSHIPS, DIAGRAMING SYSTEMS”	20%
Project 3 “SIMULATIONS, A SPATIAL CONSTRUCTION”	50%

Prerequisites:

Concurrent registration in the 318 Architectural Design studio.

Textbooks/Learning Resources: None.

Faculty:

Fall 2010	Christine Yogiaman, Assistant Professor, Coordinator Kelley Van Dyke, Lecturer Brian Newman, Lecturer
Fall 2009	Kelley Van Dyke, Lecturer, Coordinator Brian Newman, Lecturer Jonathan Murphy, Adjunct Lecturer

ARCHITECTURE 408A – Digital Visualization Workshop I: 2-D Representation

1 Credit **FALL 06, 07, 08, 09, 10, 11**

Course Description:

This workshop is an introduction to basic AUTO CAD drawing layout and organization with printing process. The workshop will introduce students to importing and exporting into other graphic soft wares (Photoshop and Illustrator) allowing a basic understanding of resolution and line types with articulated graphic awareness to develop complex 2D drawing capabilities.

Course Goals & Objectives:

Goals and Objectives of the class is each student learning to express conceptual and design intent through 2-D digital output techniques.

Student Performance Criterion Addressed:

A.3. Visual Communication Skills

Topical Outline:

Conceptual Skills	10%
Design Skills	10%
Drawing and Representation Techniques	60%
Presentation Skills	20%

Prerequisites:

Concurrent registration in the 317 Architectural Design studio.

Textbooks/Learning Resources:

Computer Lab

Faculty:

Sung Ho Kim, Coordinator, Associate Professor
Nick McFadden, Instructor

ARCHITECTURE 408B – Digital Visualization Workshop II: Advanced 3-D Modeling

1 Credit **SPRING 06, 07, 08, 09, 10, 11**

Course Description:

This workshop is an introduction to complex digital modeling in RHINO 4.0 with basic NURBS Surface, Poly Surface, Solids, and Plug-in T-Spline for Subdivision modeling techniques. These skills are needed for Rapid-proto-typing outputs such as 3D Printing and CNC Milling. The workshop will introduce students to layer and object organization with file size management allowing complex and detail modeling.

Course Goals & Objectives:

Goals and Objectives of the class is each student learning to express conceptual and design intent through sophisticated digital modeling techniques.

Student Performance Criterion Addressed:

A.3. Visual Communication Skills

Topical Outline:

Conceptual Skills	10%
Design Skills	10%
Drawing and Representation Techniques	60%
Presentation Skills	20%

Prerequisites:

Concurrent registration in the 317 Architectural Design studio.

Textbooks/Learning Resources:

Computer Lab

Faculty:

Sung Ho Kim, Coordinator, Associate Professor
Nick McFadden, Instructor

ARCHITECTURE 408C – Digital Visualization Workshop III: Advanced Rendering

1 Credit **FALL 06, 07, 08, 09, 10, 11**

Course Description:

This workshop is an introduction to complex digital rendering in RHINO 4.0 with Plug-ins Flamingo, VRay, Maxwell, and Fry Rendering Engines. These skills are needed for sophisticated rendering outputs for more hyper-real visualization. The workshop will introduce students to material, lighting, camera, and global illumination processes. This workshop is required for all M.Arch students at the 419-level, who will be given priority for registration in this course. Open to other upper-level undergraduate and graduate architecture students as available space allows.

Course Goals & Objectives:

Goals and Objectives of the class is each student learning to express conceptual and design intent through sophisticated digital visualization techniques.

Student Performance Criterion Addressed:

A.3. Visual Communication Skills

Topical Outline:

Conceptual Skills	10%
Design Skills	10%
Drawing and Representation Techniques	60%
Presentation Skills	20%

Prerequisites:

Concurrent registration in the 419 Architectural Design studio.

Textbooks/Learning Resources:

None

Faculty:

Sung Ho Kim, Coordinator, Associate Professor
Brian Newman, Instructor
Nathan Smith, Instructor

ARCHITECTURE 339 - Concepts and Principles of Architecture

3 credits **FALL 06, 07, 08, 09, 10, 11**

Course Description:

Concepts and Principles in Architecture is one of the four core courses of the M. Arch 3 first professional degree curriculum. It is a lecture course covering the canonical texts in architecture.

Course Goals & Objectives:

The course surveys the major intellectual sources of the Western architectural tradition, from the Classical world to the contemporary, through a series of focused readings and discussions. Readings are chosen to highlight specific, recognized authors, as well as periods of thought and broader themes. The course introduces students to a selection of theoretical principles in the history of architecture with the intent of preparing them for informed and structured research in their graduate studies.

Each course meeting consists of an initial 50-minute focused presentation by the instructors to the entire class, followed by the issuance of questions for consideration during a subsequent 30- minute break. Following the break, the class meets in discussion sections each led by an instructor for consideration of the week's assigned readings and for extended discussion. Requirements include two exams and a research paper.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.5. Investigative Skills
A.9. Historical Tradition and Global Culture
A.10. Cultural Diversity
A.11. Applied Research
C.1. Collaboration
C.2. Human Behavior

Topical Outline:

Analytical Thinking	30%
Architecture Theory	50%
Written and Oral Expression	20%

Prerequisites:

Graduates: completion of, or simultaneous registration in, ARCH 3284, Hist of Modern Arch.
Undergraduates: completion of ARCH 3283/3284, the survey sequence in Arch. History

Textbooks/Learning Resources:

Course reader includes primary and secondary sources selected by instructors.

Faculty:

Peter MacKeith, Associate Professor, Associate Dean
Elysse Newman, Visiting Assistant Professor
Eric Mumford, Professor

ARCHITECTURE 3283/4283 – Architectural History I

3 credits **SPRING 11**

Course Description:

The course is a survey of the history and theory of architecture from the Classical era to the Enlightenment. Emphasis is on the relation between material culture and the forces that shape it including the technologies, philosophies, and socio-political structures that constitute the context in which architects act.

Course Goals & Objectives:

Build students knowledge of the history of architecture as part of the cultural, technological and scientific paradigms in the Eastern and Western world prior to 1750. Material is organized chronologically with respect to cultural paradigms. Lectures divided into seven areas that mirrored about the Renaissance in both the East and West. Each section consists of three lectures and one discussion section. The first half of the course concentrates on the Classical world and assumes a shared cosmology centered on theocracies, empire building and segregated cultures. The second half of the course focuses on pre-Enlightenment and Enlightenment era humanism where social organizations shift the focus onto man's mastery of nature and an expanded awareness of other cultures, histories, and locales.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.5. Investigative Skills
A.9. Historical Tradition and Global Culture
A.10. Cultural Diversity
A.11. Applied Research
C.2. Human Behavior

Topical Outline:

Analytical Thinking	20%
Architecture History	50%
History of Technology	10%
Written and Oral Expression	20%

Prerequisites:

None

Textbooks/Learning Resources:

Sir Banister Fletcher's *A History of Architecture*. (Twentieth Edition), Architectural Press; 20th edition.

Marvin Trachtenberg. *Architecture: From Prehistory to Postmodernity*, Reprint (2nd Edition), Prentice Hall.

In addition, primary source materials are used as supplementary readings.

Faculty:

W. Elysse Newman, Visiting Assistant Professor

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

ARCHITECTURE 3284/4284 - Architectural History II: Since 1880

3 credits **FALL 06, 07, 08, 09, 10, 11**

Course Description:

A lecture course survey of the history and theory of architecture and urbanism from the nineteenth century to the present.

Course Goals & Objectives:

The course emphasizes the understanding of the formal, philosophical, social, technical, and economic background of the work presented and discussed in regular small group section meetings.

Student Performance Criterion Addressed (list number and title):

A.1. Communication Skills
A.5. Investigative Skills
A.9. Historical Conditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research
C.2. Human Behavior

Topical Outline:

Conceptual Skills (80%)
Design Skills (n/a—not a design studio)
Drawing and Representation Techniques (n/a)
Presentation Skills (20%)

Prerequisites:

None; this is a required course.

Textbooks/Learning Resources:

William J.R. Curtis, *Modern Architecture since 1900*

Faculty:

Eric Mumford, PhD, Professor

ARCHITECTURE 438 – Environmental Systems I

3 credits **FALL 10, SPRING 11**

Course Description:

This is the foundation course in the architectural technology sequence. It addresses the relationship between buildings and an expanded idea of context, including environmental, material and spatial realms.

Course Goals & Objectives:

- To understand the factors creating climate and the relationship of climate and passive design techniques;
- To understand the principles of site planning and site grading;
- To understand natural light and energy flows through the building envelope.

Student Performance Criterion Addressed:

A.8. Ordering Systems Skills
B.1. Pre-Design
B.2. Accessibility
B.3. Sustainability
B.4. Site Design
B.8. Environmental Systems
B.10. Building Envelope Systems
B.11. Building Service Systems
B.12. Building Materials and Assemblies

Topical Outline:

Climate Issues	33%
Site Design Issues	33%
Building Energy Issues	34%

Prerequisites:

None

Textbooks/Learning Resources:

No required textbooks. See class schedule for required readings and course bibliography for learning resources.

Faculty:

Andrew Cruse AIA LEED AP, Visiting Assistant Professor

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Washington University in St. Louis

ARCHITECTURE 439 – Environmental Systems II

3 credits **SPRING 11**

Course Description:

Building upon the passive strategies explored in Environmental Systems I, this course will lay the foundation for the integration of *active* environmental systems with enclosure, space, and the requirements for human occupation. This will be done through the study of climate, air, temperature, water, light, sound, and energy. Each topic will be assessed against problems, principles, possibilities and potential.

This course focuses on how important it is to consider active systems as part of an integrated design strategy addressing both FORM and PERFORMANCE throughout the design process.

Course Goals & Objectives:

- To convey a basic, sound understanding of active systems for architecture toward human comfort - knowledge transfer through lecture, discussion and readings.
- To teach fundamental strategies for systems integration and application through specific course work exercises.
- To enable an understanding of, and approach to, building systems integration through strategic dialogue with consultants, operators, and facilities management.
- To encourage synthesis of 'technical' course material though concurrent studio and seminar design projects, i.e. rather than compartmentalizing material, students will be encouraged to apply material and synthesis through their whole design process.

Student Performance Criterion Addressed:

B.1 Pre-Design
B.3 Sustainability
B.8 Environmental Systems
B.10 Building Envelope Systems
B.11 Building Service Systems
B.12 Building Materials and Assemblies

Topical Outline:

Thoroughness of exploration and analysis	40%
Clear indication of understanding of a condition through analytical diagram	40%
Quality of presentation both in terms of content and graphics	20%

Prerequisites:

Successful completion of Architecture 447A - Structures I & Architecture 438 - Environmental Systems I

Textbooks/Learning Resources:

Various – see syllabus

Faculty:

Jenny Lovell, Assistant Professor
Randy Burkett , Lecturer (1 week)
Lily Wang, Lecturer (1 week)

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ARCHITECTURE 447A – Structures I

3 credits **FALL 06, 07, 08, 09, 10, 11**

Course Description:

Understanding gravity and lateral forces present in buildings and how those forces are distributed. Understanding the basic response of sections to stresses imposed by forces.

Course Goals & Objectives:

- understand how forces are imposed on individual members in a building structure as determined by the building codes as well as practical considerations
- understand how the building design affects that distribution and the elements' responses
- understand individual sections' responses to shear, moment, axial forces and temperature changes in order to prepare for more detailed studies of particular wood, steel, concrete and composite sections in later coursework
- understand the distribution of forces in simple span and continuous beams and in trusses, cables and frames in order to illustrate how different types of structures resist imposed forces
- understand how wind and seismic forces are determined by the code and how they are resisted as opposed to generally more familiar and more intuitive gravity forces
- understand how to document the loads and forces in preparation for element design

Student Performance Criterion Addressed (list number and title):

A.1. Communication Skills
A.2. Design Thinking Skills
A.5. Investigative Skills
B.9. Structural Systems
B.12. Building Materials and Assemblies
C.1. Collaboration
C.3. Client Role in Architecture
C.7. Legal Responsibilities
C.8. Ethics and Professional Judgment

Topical Outline:

Conceptual Skills (50%)
Design Skills (40%)
Representation Techniques (10%)

Prerequisites:

None

Textbooks/Learning Resources:

Weekly handouts provided.

Faculty:

Phillip Shinn, Senior Lecturer

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Sam Fox School of Design & Visual Arts
Washington University in St. Louis

ARCHITECTURE 448A – Structures II

3 credits **SPRING 06, 07, 08, 09, 10, 11**

Course Description:

Implementation of the code design of wood, steel, concrete, masonry and composite beams, columns, walls and foundations in buildings using allowable stress and strength designs.

Course Goals & Objectives:

- understand how stresses are distributed and resisted within different types of building materials and different structural elements.
- understand how the response of different types of materials changes depending upon the stiffness of the material, its allowable stresses, and the nature of the failure, whether brittle or ductile.
- understand the philosophical differences between allowable stress and strength design and gain some understanding of the history and evolution of design practices in response to economic and historical pressures.
- understand the code design requirements and limitations for different types of structural materials and elements.
- understand construction practices and the practicality of different types of material designs in different situations.
- understand how individual members of the design team as well as the owner might approach the design of structural elements and coordinate the design requirements.

Student Performance Criterion Addressed (list number and title):

A.1. Communication Skills
A.2. Design Thinking Skills
A.4. Technical Documentation
A.5. Investigative Skills
B.9. Structural Systems
B.12. Building Materials and Assemblies
C.1. Collaboration
C.3. Client Role in Architecture
C.7. Legal Responsibilities
C.8. Ethics and Professional Judgment

Topical Outline:

Conceptual Skills (50%)
Design Skills (40%)
Representation Techniques (10%)

Prerequisites:

Successful completion of Architecture 447A

Textbooks/Learning Resources:

Weekly handouts provided.

Faculty:

R. Phillip Shinn, Senior Lecturer

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ARCHITECTURE 346 – Building Systems

3 credits **SPRING 07, 08, 09, 10, 11, FALL 11**

Course Description:

This introductory course will examine the performance and properties of building materials, both traditional and new, through an analysis of assemblies and related systems. Investigations of wood, masonry, steel and concrete and the integration of relevant building systems will provide the fundamental structure for the course. All systems will be investigated relative to their architectural purpose, impact on the environment, technical principles and will also consider manufacturing, construction, our profession and society in which we practice.

Moreover, the course will also examine the performance characteristics of contemporary enclosure technology and explore the impact these technologies are having on design thinking.

Although we will focus primarily on the aforementioned topics, we will also identify and consider the impact of other parameters on design and performance such as: building codes, role of the profession, health and life safety, systems integration, sustainability and industry standards.

Course Goals & Objectives:

The course strives to provide students with a sound familiarity and understanding of traditional building systems in wood, steel and concrete; as well as the skills necessary to represent these systems. The course also seeks to expose students to the material and poetic potential of these technologies related to the making of architectural environments.

Student Performance Criterion Addressed:

A.4.	Technical Documentation	B.11.	Building Service Systems
A.7.	Use of Precedents	B.12.	Building Materials and Assemblies
B.9.	Structural Systems	C.1.	Collaboration
B.10.	Building Envelope Systems		

Topical Outline:

Lecture	Client, Project and Practice Management	10%
Lecture	Building Materials, Systems and Assemblies	45%
Lab	Representation, Collaboration and Documentation	30%
Lab	Applied Research	15%

Prerequisites:

None

Textbooks/Learning Resources:

Edward Allen, Fundamentals of Building Construction: Materials and Methods, 5th Ed. Wiley
F. Ching, Building Construction Illustrated

Faculty:

Eric R. Hoffman, AIA LEED AP, Visiting Assistant Professor
(co-taught Spring 2007 with Professor Paul Donnelly)

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ARCHITECTURE 538C – Advanced Building Systems

3 credits **FALL 09, 10, 11**

Course Description:

Advanced Building Systems is a lecture, research and workshop course. It is the capstone course in the building technology sequence in the graduate school of architecture. This course focuses on contemporary building systems related to Structure, Enclosure, Climate Control and Light. The course explores a range of systems in these categories. These technologies are considered relative to technical theory and issues related to manufacturing, construction and systems integration. All systems are reviewed as they relate to architectural issues of order, hierarchy, program, site, etc…The course is both qualitative and quantitative.

Course Goals & Objectives:

The course will expose students to a range of building technologies in architectural environments and highlight the technical issues that come to bear on the "making" of architecture. The course deals in a very specific way with the craft of architecture.

Student Performance Criterion Addressed:

A.7. Use of Precedents
A.11. Applied Research
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
C.1. Collaboration
C.6. Leadership

Topical Outline:

40% Research and Analysis (Environmental, Structural, Envelope, Service Systems)
40% Design Integration (Environmental, Structural, Envelope, Service Systems)
20% Oral, Written, Visual Communication

The first half of the semester focuses on an expansion of previously introduced theoretical issues related to structure, enclosure, climate control (active and passive), and lighting (natural and artificial). During a series of lectures on the above, students initiate an analysis of technical precedent in architecture exercise. The research, conducted by teams of either three or four students, is presented to the class and guest jurors at mid semester.

During the second half of the semester, students identify and integrate the appropriate technologies to advance an architectural scheme developed in a prior design studio. Again in teams of three or four, students are required to identify appropriate systems for structure, enclosure, climate control (active and passive) and light (natural and artificial) to advance their architectural proposition. Appropriate building systems will be identified based on technical necessity, sustainability, architectural appropriateness and systems integration. Projects will be presented at the end of the semester to the class and guest critics.

Prerequisites:

Building Systems, Structures I & II and Environmental Systems I are prerequisites for this course. The additional prerequisite or co-requisite is Environmental Systems II.

Textbooks/Learning Resources:

Edward Allen, Fundamentals of Building Construction: Materials and Methods, Wiley; Allen & Iano, The Architect's Studio Companion, Wiley; Tao & Janis, Mechanical and Electrical Systems in Buildings, Prentice Hall, Inc.; Bachman, L. Integrated Buildings: A Systems Basis for Architecture, Wiley, 2002

Faculty:

Paul J. Donnelly, Rebecca and John Voyles Professor of Architecture
Richard Janis, PE, Senior Lecturer

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Sam Fox School of Design & Visual Arts
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ARCHITECTURE 580 – Design Thinking: Research and Design Thinking

3 credits **FALL and SPRING 04, 05, 06, 07, 08, 09, 10, 11**

Course Description:

Develop an independent, critical position on the making of architecture in the world – an individually initiated intentional, programmatic, and situational framework to serve as the basis for the self-directed Degree Project studio.

Course Goals & Objectives:

- With extensive data-gathering research in a chosen area of inquiry the student will develop an aspiring and compelling conceptual framework in book and/or poster format. This project premise will position the student's intentions in a clear relationship to a contemporary architectural discourse.
- Site and program requirements will then be developed to support the project's intentional basis. Site data and documentation will be prepared for Degree Project.
- Work in this class is foundational of the Degree Project studio wherein each student is expected to initiate, and convincingly develop all aspects of an architectural project – formal, spatial, experiential, organizational, structural, and technical – and create a clear, full, and persuasive presentation of her or his work.

Student Performance Criteria Addressed :

A.1.	Communication Skills	A.9.	Historical Traditions and Global Culture
A.2.	Design Thinking Skills	A.10.	Cultural Diversity
A.3.	Visual Communication Skills	A.11.	Applied Research
A.5.	Investigative Skills	B.1.	Pre-Design
A.7.	Use of Precedents	C.2.	Human Behavior

Topical Outline:

Conceptual Skills	20%
Research Skills	40%
Drawing and Representation Techniques	20%
Presentation Skills	20%

Prerequisites:

500-level standing or above.

Textbooks/Learning Resources:

Metapolis Dictionary for Advanced Architecture; Manuel Gauza and others; Actar Press, 2003.

Faculty:

Derek Hoeferlin, Coordinator, Senior Lecturer (Fall 2010-present)
Patty Heyda, Coordinator, Assistant Professor (2009)
Phil Holden, Senior Lecturer (2009)
Pablo Moyano, Lecturer (Fall 2010-present)
Jenny Lovell (2009-2010)
Adrian Luchini, Raymond E. Maritz Professor (2009-present)
Ken Tracy, Visiting Assistant Professor (Fall 2010)
Ben Fehrmann, Lecturer (Spring 2011)
Andrew Faulkner, Adjunct Lecturer (Spring 2011)

ARCHITECTURE 646 - PROFESSIONAL PRACTICE I

3 credits **FALL and SPRING 06, 07, 08, 09, 10, 11**

Course Description:

Study of professional practice topics focusing particularly on firm management and project management, the role of the professional in society and professional ethics. Course structure encourages interactive discussion and team projects, culminating in a mock lawsuit which draws upon and brings into focus previously covered practice topics.

Course Goals & Objectives:

The goal of this course is to provide students with a working knowledge of professional practice-required activities through an exposure to and study of the course topics, creating a familiarity with these activities and responsibilities for use in future architectural practice settings.

Student Performance Criteria Addressed:

A.1. Communication Skills
B.7. Financial Considerations
C.1. Collaboration
C.2. Human Behavior
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 Judgment
C.9. Community & Social Responsibility

Topical Outline:

Types of practices	7%
Professional ethics	7%
Marketing & public relations	10%
Financial management	10%
Legal aspects	6%
Building codes & zoning ordinances	7%
Client relations	7%
Dispute resolution	10%
Project management	10%
Project team/construction process	9%
Contracts	7%
Construction cost estimating & scheduling	7%
IDP	3%

Prerequisites:

500-600 level standing

Textbooks/Learning Resources:

Financial analysis handouts ; AIA Documents ; AIA Code of Ethics ; Project organization chart ; Articles & case studies pertaining to legal issues ; Contracts ; Code & zoning documents

Faculty:

George W. Johannes, AIA, Senior Lecturer
Jim Scott, Lecturer

ARCHITECTURE 421P - BERTRAND GOLDBERG: MARINA CITY AND THE AURA OF CHICAGO MODERNISM

3 credits **FL 08, FL 09**

Course Description:

Through examination of Bertrand Goldberg's work, this seminar explores the broader relationship between architectural modernism, visual imagery, and finance.

Course Goals & Objectives:

1. To understand the interplay of finance, architecture and engineering in architectural modernism.
2. To understand Chicago's role in the greater trajectory of Modern Architecture.

Student Performance Criterion Addressed (list number and title):

A.1. Communication Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.8. Ordering Systems Skills
A.9. Historical Traditions and Global Culture
A.11. Applied Research
C.3. Client Role in Architecture
C.6. Leadership
C.8. Ethics & Prof. Judgment

Topical Outline:

Critical Thinking Skills (40%)
Research Skills (30%)
Presentation Skills – Written and Verbal (20%)
Participatory Skills / Discussions, Seminar Leadership, etc. (10%)

Commissioned by the Janitors' Union and designed by Bertrand Goldberg, Marina City was a pioneering mixed-use complex that foreshadowed Chicago's renaissance. Integrating architectural, real estate and labor history, the course examines the role of public-private partnerships in the formation of architectural and urban change.

Prerequisites:

Concepts & Principles, Architectural History I and II, or equivalent course waivers.

Textbooks/Learning Resources:

C. Waldheim and K. Ruedi Ray, eds. *Chicago Architecture* (Chicago: Univ. of Chicago Press, 2005)
M. Ragon, *Goldberg: Dans La Ville / In the City* (Paris Art Center, 1985)

Faculty:

Igor Marjanovic, Associate Professor

College of Architecture
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Sam Fox School of Design & Visual Arts
Washington University in St. Louis

ARCHITECTURE 464A - ARCHITECTURE & PHOTOGRAPHY

3 credits **SPRING 00, 01, 02, 05, 06, 09, 10 ,11**
FALL 03, 04, 07

Course Description:

Seminar examines photography's role in the representation of architecture, landscape and the city. Historical content begins with photography's 19th century origins up to the present.

Course Goals & Objectives:

The course introduces students to the subject of photography as both commissioned and interpretive representations of architecture and the city. Goals include broadening the students' understanding of the historical context of primary readings and photographic work, and the relationships to architectural history, promotion and theory.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.9. Historical Traditions & Global Culture

Topical Outline:

Lectures, Readings & Discussion	70%
Student Projects	30%

Prerequisites:

None

Textbooks/Learning Resources:

Course reserve list, no required textbook.

Faculty:

Stephen Leet, Professor

College of Architecture
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ARCHITECTURE 471A - CONTINUITY & TRANSFORMATION

3 credits **FALL 03, 04, 05, 06, 07, 08, 09, 10, 11**

Course Description:

Throughout history and across cultures, certain ideas, concepts and organizational strategies have persisted in architecture, despite advances in social ideals and technological capabilities. The seminar explores the phenomenon of this continuity with the goal of uncovering the manner in which these ideas and strategies are transformed. Whether classified by use, characteristic form, or compositional device, the continuity of these notions is clearly traceable as trajectories of development and transformation, a body of knowledge waiting to be revealed, understood, assessed and, when valid, built upon.

Course Goals & Objectives:

To introduce and define the concept of architectural typology (*definition*)
To present prominent theories and taxonomies of architectural typology (*history*)
To study significant classifications within those theories (*structure*)
To present the broad spectrum of applications: from basic building configurations and elements to patterns of urbanization (*scope*)
To understand and exercise the concept of type transformation (*interpretation and implementation*)
To understand the value of typological knowledge and its limitations (*judgement*)
To understand the difference between model and type (*authoritative, precise model versus suggestive, metaphoric type)*

Student Performance Criterion Addressed:

A.1. Communication Skills
A 3. Visual Communication Skills
A.5. Investigative Skills
A.8 Ordering Systems Skills
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research
C.2. Human Behavior

Topical Outline:

Seminar Reading and Discussion	40%
Vernacular and Early Ideas of Type	
Modernism and Type	
Post-Modernism and Type	
The Urban Courtyard House	
Palaces and Hôtels	
Urban Rowhouses	
American Apartment Houses and Tenements	
Typologies of American Urban Form	
The Trajectory of Type	
Fieldwork and Analysis / Presentation and Paper	35%
Final Paper	25%

Prerequisites: None

Textbooks/Learning Resources:

Selected Readings: van Eyck, Vidler, Hernandez, Gropius, LeCorbusier, Forster, Colqhoun, C. Rowe, Argan, Rossi, Krier, Venturi, Schoenauer, McKay, McHarg, Dennis, Summerson, Lockwood, Lipstadt, Plunz, Pommer, Vernez-Moudon, P. Rowe, Stein, Koolhaas, Frampton, Tzonis, Goode, Tsumi, Eisenmann

Faculty: Iain Fraser, Professor

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ARCHITECTURE 484C - METABOLIC CITY: DRAWING & URBANISM

3 credits **FALL 09, 10, 11**

Course Description:

This seminar examines mid century modernist architecture and art works by the Japanese Metabolist artists and architects, the British Archigram architects, and the Dutch artist Constant Nieuwenhuys, an early member of the group of European artists and activists known as the Situationist International.

Course Goals & Objectives:

- Develop understanding of theoretical frameworks of experimental urbanism
- Understand interrelated concepts: networked systems of urban circulation, adaptable habitats, engineering technologies, cultural influences

Student Performance Criterion Addressed:

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.7. Use of Precedents
A.8. Ordering Systems Skills
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research
C.2. Human Behavior
C.9. Community and Social Responsibility

Topical Outline:

Conceptual Skills	60%
Design Skills	10%
Drawing and Representation Technique	10%
Presentation Skills	20%

Prerequisites:

Concepts & Principles, Architectural History I and II, or equivalent course waivers.

Textbooks/Learning Resources:

Readings and class lectures

Faculty:

Heather Woofter, Associate Professor

ARCHITECTURE 522C - COLLECTIVE FORM & THE VERNACULAR: THE AEGEAN CRUCIBLE AND MODERN URBAN DESIGN

3 credits **FALL 09**

Course Description:

This course considers the concept of vernacular architecture and looks at the development of Greek Island towns. It then examines postwar uses of urban models there in the work of modern architects.

Course Goals & Objectives:

The course emphasizes the understanding of the formal, philosophical, social, technical, and economic background of the work presented and discussed. This course sought to further understanding of how modernist urban design used the dense vernacular environments such as those of the Greek Islands as models for sustainable urban design typologies such as courtyard and terrace houses and small enclosed pedestrian plazas, which were often grouped into larger open-ended collective urban arrangements.

Student Performance Criteria Addressed:

A.1. Communication Skills
A.5. Investigative Skills
A.8. Ordering Systems Skills
A.9. Historical Conditions and Global Culture
A.11. Applied Research
A.10. Cultural Diversity

Topical Outline:

- 10% Introduction: the concept of the vernacular in modern architecture and in the Greek Islands.
- 10% The geopolitical context. Vernacular and formal expressions of two different Aegean political formulations
- 10% Collective fortification: Kastro. The building type: concept, characteristics, and relationship to site.
- 10% Eighteenth and early nineteenth century Enlightenment Greek Revival in Greece
- 10% The vernacular and modern architecture, 1: before the Second World War
- 10%The vernacular and modern architecture, 2 : in the postwar "developing world": Sert & Wiener in Latin America; Candilis-Josic-Woods in Africa
- 10% The vernacular and modern architecture, 3: A new vernacular? Patrick Geddes, Constantinos Doxiadis, Jaqueline Tyrwhitt, and *Ekistics*, 1955-83
- 10% Vernacular perspective in the modernist campus architecture of the 1960s (tour)
- 10% The vernacular and global urbanism in the 1960s : Fumihiko Maki and Bernard Rudofsky's *Architecture without Architects*
- 10% The vernacular since 1968

Prerequisites:

Concepts & Principles, Architectural History I and II, or equivalent course waivers.

Textbooks/Learning Resources:

Constantine Michaelides, *The Aegean Crucible*
Eric Mumford, *Defining Urban Design: CIAM Architects and the formation of a discipline, 1937-69*

Faculty:

Eric Mumford, Professor
Constantine Michaelides, Dean Emeritus (Dean 1973-93)

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ARCHITECTURE 527G – LOUIS KAHN & ALVAR AALTO: CRITICAL STUDIES

3 credits **FALL 10, 11**

Course Description:

This seminar will examine the two signal architects of the late 20th century, through focused examinations of their biographies, written statements and significant buildings: the Salk Institute and the British Art Center, among others, by Kahn and the Säynätsalo Town Hall and the Villa Mairea, among others, by Aalto.

Course Goals & Objectives:

The course structure intertwines the progress of each architect's career and production with the other's, and places them both as well in their historical and theoretical contexts. Thematic issues of site, tectonics, purposes, and formal principles are addressed, and the subsequent critical interpretations of the built works are reviewed.

The seminar will focus primarily on twelve major built works by each architect, with students being responsible for both achieving a thorough understanding of particular works by Aalto and Kahn, and for describing and explaining these works to others. Overall, the seminar is structured around three sources of work: readings, presentations and projects. Each meeting will have required readings to prepare in advance, as well as required research areas for students to bring to the seminar meeting for presentation. There are three larger projects, each scheduled for completion and presentation every four weeks: one a flat work (board-mounted) presentation of an individual work, one a group-built large-scale model of a selected project, and a final individual project, developed in consultation with the instructor, and presented at the final meetings of the seminar.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.8. Ordering Systems Skills
A.9. Historical Conditions & Global Culture
A.10. Cultural Diversity
A. 11. Applied Research
C.2. Human Behavior
C.9. Community and Social Responsibility

Topical Outline:

Research and Analysis	60%
Oral and Visual Presentation	20%
Written Assignments	20%

Selected works (12 for each architect) are the subject of analysis through surveys of archival drawings and constructed models. An overview of the legacy of Kahn and Aalto as represented in contemporary architectural culture will conclude the seminar; particular regard will be given to the inheritors of the Kahn and Aalto legacies.

Prerequisites:

Concepts & Principles, Architectural History I and II, or equivalent course waivers.

Textbooks/Learning Resources:

Curtis, William, J. R., *Modern Architecture since 1900*, selected chapters
Frampton, Kenneth, *Modern Architecture: A Critical History*, selected chapters

A comprehensive book bibliography specific to each architect has been placed on closed reserve in the Art and Architecture library. Project assignments will require the development of further bibliographical material (journal articles, critical essays, websites, etc.), specific to each building researched and presented.

Faculty: Peter MacKeith, Associate Professor, Associate Dean

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

ARCHITECTURE 527N - DESIGN AT AN IMPASSE: THE EXPERIENCE OF LINA BO BARDI

3 credits **SPRING 10, FALL 11**

Course Description:

This history and theory seminar addresses timely issues about architecture by studying the design and writings by Italian-born Brazilian architect Lina Bo Bardi. Introduction to issues regarding gender and architecture, popular and educated culture, European and American cultural exchanges, migrant architects, and hybridization.

Course Goals & Objectives:

Seminar in three modules: lectures; student presentations and exhibition project. Introduction to issues regarding gender and architecture, cultural exchanges and hybridization, migrant architects.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.7. Use of Precedents
A.8. Ordering Skills
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research
C.1. Collaboration

Topical Outline:

Conceptual Skills	40%
Design Skills	30%
Drawing and Representation Techniques	10%
Presentation Skills	20%

Prerequisites:

Concepts & Principles, Architectural History I and II, or equivalent course waivers.

Textbooks/Learning Resources:

Lina Bo Bardi, In Times of Roughness: Design at an Impass, São Paulo: Bardi Institute, 1994.
Marcelo C. Ferraz (ed.), *Lina Bo Bardi*, Milan/São Paulo: Charta/Bardi Institute, 1994.
Antonella Gallo (ed.), *Lina Bo Bardi:* architetto, Venice: Marsilio, 2004
Zeuler Lima, *Lina Bo Bardi: Toward a Simple Architecture*, Rome: Bruno Zevi Foundation, 2007.
Olivia de Oliveira, *Lina Bo Bardi: Built Works*, Barcelona: Gustavo Gili, 2004.
Several articles about Italian and Brazilian modern architecture, texts by Lina Bo Bardi and archival material and images.

Faculty:

Zeuler Lima, Ph.D., CREA-BR, Associate Professor

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

ARCHITECTURE 527Q – CONTEMPORARY NORDIC ARCHITECTURE

3 credits **SPRING 07, 09, 11**

Course Description:

This seminar will examine the current vigor of architecture practice in the Nordic countries – Finland, Sweden, Norway, Denmark and Iceland – through focused studies on significant and emerging architects, built and projected works, and historical and theoretical frameworks.

Course Goals & Objectives:

Issues of regionalism, urban and housing design, tectonics and materials, environmental design and sustainability, social responsibility and national representation all serve as thematic filters for discussion and evaluation.

- To develop a knowledge base of contemporary architecture "on the periphery" through research, interview and experience;
- To develop and refine methods of appraisal and critique, and a language for each;
- To develop alertness to the technological means of environmental design response (materials, construction, structure and system);
- To develop alertness to the historical and cultural means of societal design response (vernacular, precedent, context, ornament, detail)

Student Performance Criterion Addressed:

A.1. Communication Skills
A.5. Investigative Skills
A.8. Ordering Systems Skills
A.9. Historical Conditions & Global Culture
A.10. Cultural Diversity
C.2. Human Behavior
C.9. Community and Social Responsibility

Topical Outline:

Research and Analysis	60%
Oral and Visual Presentation	20%
Written Assignments	20%

Beginning with overviews of the significant 20th century architects and works that conventionally characterize the Nordic architectural reputation – Aalto and Pietila in Finland, Asplund and Lewerentz in Sweden, Jacobson and Utzon in Denmark, Korsmo and Fehn in Norway, among others – the seminar will address the late 20th century legacy of these architects, and move rapidly to survey and assess the succeeding generation before turning directly to the architects and works of the last 20 years.

Prerequisites:

Concepts & Principles, Architectural History I and II, or equivalent course waivers.

Textbooks/Learning Resources:

Guest Lecturers / Optional Excursions
Curtis, William, J. R., *Modern Architecture since* 1900, selected chapters
Frampton, Kenneth, *Modern Architecture: A Critical History*, selected chapters

A comprehensive book bibliography has been placed on closed reserve in the Art and Architecture library. Project assignments will require the development of further bibliographical material (journal articles, critical essays, websites, etc.), specific to each building researched and presented.

Faculty:

Peter MacKeith, Associate Professor-Architecture, Associate Dean, SFS

ARCHITECTURE 528M - ARCHITECTURAL ASSOCIATION, 1971-1990: TEXTS, BUILIDINGS AND DRAWINGS

3 credits **SP/FL 07, SP 09, SP10, SP/FL 11**

Course Description:

This seminar examines the convergence of curatorial, publishing and professional practices at the Architectural Association in London under the chairmanship of Alvin Boyarsky (1971-1990).

Course Goals & Objectives:

To understand the role of primary theoretical concepts in the development of design ideas.

Student Performance Criterion Addressed (list number and title):

A.1. Communication skills
A.5. Investigative Skills
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research
C.6. Leadership
C.8. Ethics and Professional Judgment

Topical Outline:

Critical Thinking Skills (40%)
Research Skills (30%)
Presentation Skills – Written and Verbal (20%)
Participatory Skills / Discussions, Seminar Leadership, etc. (10%)

Through a focused study of the work of Alvin Boyarsky and his AA network – Zaha Hadid, Rem Koolhaas, Bernard Tschumi, and others – the seminar establishes a relationship between architectural theory and practice. It integrates primary theoretical texts with a selection of *AA Publications,* linking architecture with theories of image production, collection and dissemination.

Prerequisites:

None.

Textbooks/Learning Resources:

Course reader.

Faculty:

Igor Marjanovic, Associate Professor

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

ARCHITECTURE 528P – Contemporary Critical Regional Practices: 20 Case Studies

3 credits FALL 2009, FALL 2010

Course Description:
A graduate History/Theory seminar requiring students to develop and present research on practice methods and analysis of selected works by twenty contemporary practices from around the world that exemplify the concept of "critical regionalism." Fulfills M.Arch History/Theory distribution requirement.

Course Goals & Objectives:
1. In addition to studying the work of architects included in the historical cannon, it is of the utmost importance for schools of architecture to foster the study of contemporary practitioners, including both established and emerging firms, using critical methods of design relevance.
2. This course assumes that culturally relevant practices of architecture today are critical continuations of modern architecture, and that neither "historicist" nor "de-constructivist" post-modernism offer a culturally resonant mode of practice in the contemporary world; in this, the idea of "critical regionalism" has emerged as one of the most appropriate critical concepts. What makes these buildings modern? What makes these buildings regional? What is a critical practice?
3. This course operates with the assumption that critical events in the history of architecture are most often scripted in stylistic or purely formal terms. Yet for practicing architects, an altogether different definition of architecture is what matters – a definition not to do with fashion and form, but to do with the tradition of building, the making of places, and the experience of those who inhabit architecture.
4. This course requires students to undertake critical analyses of selected works by contemporary architects, developed through structured research, and presented in class by teams of two students. In order to encourage a more comprehensive understanding of the architectural experience, and the process of design that underlies it, the class employs a methodology related more to the synthetic and analytical character of architectural practice than to the formal and comparative methods of architectural history. The analytical process the class employs emphasizes the underlying principles of design set into the work of architecture by the manner in which it is ordered and constructed. This class will emphasize the typological transformations and regional connotations that engage local building types, building materials and traditions, geology, climate and light.

Student Performance Criterion Addressed:

A.1. Communication Skills	A.11. Applied Research
A.3. Visual Communication Skills	C.1. Collaboration
A.5. Investigative Skills	C.2. Human Behavior
A.8. Ordering System Skills	C.6. Leadership
A.9. Historical Traditions & Global Culture	C.8. Ethical and Professional Judgment
A.10. Cultural Diversity	C.9. Community and Social Responsibility

Topical Outline:
Research (40%), Presentation (40%), Discussion (20%).
Students, working in teams of two, research and make two class presentations and summary papers, which are required to include: documentation of regional characteristics; overview of assigned practice's works; and selected building analysis, involving analysis of 1) context, 2) interior spatial hierarchy, 3) goal-route, 4) geometric order, 5) spatial/structural relation, 6) tectonic, 7) materials, 8) light/shadow, 9) typological transformation, and 10) connotation and meaning.

Prerequisites:
Concepts & Principles, Architectural History I and II, or equivalent course waivers.

Textbooks/Learning Resources:
Required text: *Architectural Regionalism: Collected Writings on Place, Identity, Modernity and Tradition,* Vincent Canizaro. Research on individual practices from multiple sources.

Faculty: Robert McCarter, Ruth and Norman Moore Professor of Architecture

ARCHITECTURE 565C - ARCHITECTURE, PHOTOGRAPHY, and FILM

3 credits **FALL 09, FALL and SPRING 10, FALL 11**

Course Description:

Seminar examines relationships between cinema and architecture. Films studied include documentaries, and films with architecture, landscape and the city as subject.

Course Goals & Objectives:

Goals & objectives include first establishing, and then understanding the similarities and differences between the depiction of space in cinema and architecture. Students view, discuss and then analyze a particular film or film's spatial and temporal sequence.
As an interpretive design project, each student, following discussion proposes a cinematic theme to research. The student's responsibility is to design an innovative form of visual analysis that effectively communicates their thesis. Each student must design and present their analysis to the seminar and submit a booklet or graphic of their analysis.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.9. Historical Traditions & Global Culture
C.2. Human Behavior

Topical Outline:

Lectures, Readings & Discussion	70%
Student Projects	30%

Prerequisites:

Concepts & Principles, Architectural History I and II, or equivalent course waivers.

Textbooks/Learning Resources:

Course reserve list includes films and books, no required textbook.

Faculty:

Stephen Leet, Professor

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

ARCHITECTURE 567C – Contemporary Critical Global Practices: Ten Case Studies

3 credits SPRING 2010

Course Description:
A graduate History/Theory seminar requiring students to develop and present research on practice methods and analysis of selected works by twenty contemporary practices from around the world that exemplify the concept of "critical globalism." Fulfills M.Arch History/Theory distribution requirement.

Course Goals & Objectives:
1. In addition to studying the work of architects included in the historical cannon, it is of the utmost importance for schools of architecture to foster the study of contemporary practitioners, including both established and emerging firms, using critical methods of design relevance.
2. This course assumes that culturally relevant practices of architecture today are critical continuations of modern architecture, and that neither "historicist" nor "de-constructivist" post-modernism offer a culturally resonant mode of practice in the contemporary world. What makes these buildings modern? In what way are these buildings the result of critical practices?
3. The conception of "critical globalism" has recently been developed to address those practices that operate both inside their home countries and in multiple places around the world. While critical events in the history of architecture are most often scripted in stylistic or purely formal terms, yet practicing architects employ an altogether different definition of architecture, one relating to the tradition of building, the making of places, and the experience of those who inhabit architecture.
4. This course requires students to undertake critical analyses of selected works by contemporary architects, developed through structured research, and presented in class by teams of two students. In order to encourage a more comprehensive understanding of the architectural experience, and the process of design that underlies it, the class employs a methodology related more to the synthetic and analytical character of architectural practice than to the formal and comparative methods of architectural history. The analytical process the class employs emphasizes the underlying principles of design set into the work of architecture by the manner in which it is ordered and constructed. This class will emphasize the typological transformations and regional connotations that engage local building types, building materials and traditions, geology, climate and light.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.8. Ordering System Skills
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research
C.1. Collaboration
C.2. Human Behavior
C.6. Leadership
C.8. Ethical and Professional Judgment
C.9. Community and Social Responsibility

Topical Outline:
Research (40%), Presentation (40%), Discussion (20%).
Students, working in teams of two, research and make one class presentation and summary paper, which are required to include: documentation of regional characteristics; overview of assigned practice's works; and selected building analysis, involving analysis of 1) context, 2) interior spatial hierarchy, 3) goal-route, 4) geometric order, 5) spatial/structural relation, 6) tectonic, 7) materials, 8) light/shadow, 9) typological transformation, and 10) connotation and meaning.

Prerequisites:
Concepts and Principles, Architectural History I and II, or equivalent course waivers.

Textbooks/Learning Resources:
Required text: Selections from *Comparative Critical Analyses of Built Form*, and *Modern Architecture: A Critical History*, Kenneth Frampton. Research on individual practices from multiple sources.

Faculty: Robert McCarter, Ruth and Norman Moore Professor of Architecture

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ARCHITECTURE 570 - HISTORY OF LANDSCAPE ARCHITECTURE, 1850-1970

3 credits **FALL 10, 11**

Course Description:

This course presents the history of landscape architecture from 1850 to 1970 with a particular emphasis on the Western world. A series of lectures and discussions will highlight themes that are of continued relevance, including professional identity, regionalism and nationalism, gender and design, and social and ecological responsibility.

Course Goals & Objectives:

Projects will range from the garden to the city and from garden city to highway. The scope of investigations will integrate lesser-known or marginalized figures of landscape architecture to critically assess the role and image of the profession. Students are expected to actively participate in class, respond to readings in writing, and establish parallels between historical and contemporary examples. By studying the projects and writings that defined the modern landscape architecture discipline and by exploring connections to urbanism and architecture, students will be able to situate their own design investigations in a historical context.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.5. Investigative Skills
A.8. Ordering Systems Skills
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research

Topical Outline:

Participation in class	15%
Assignment 1 (essay)	25%
Assignment 2 (graphic/model project)	30%
Final exam (take home)	30%

Prerequisites:

None

Textbooks/Learning Resources:

Selected readings on reserve, including:

Corner, James. *Recovering Landscape: Essays in Contemporary Landscape Architecture*. New York: Princeton Architectural Press, 1999

Hargreaves, George. *Large Parks*. New York: Princeton Architectural Press, 2007

Herrington, Susan. *On Landscapes*. New York: Routledge, 2009

Imbert, Dorothée. *The Modernist Garden in France.* New Haven: Yale University Press, 1993 [SB470.55 F8 I43 1993]

Newton, Norman T. *Design on the Land; the Development of Landscape Architecture*. Cambridge, MA: Harvard University Press, 1971 [SB470.5 N47]

Rogers, Elizabeth Barlow. *Landscape Design: A Cultural and Architectural History.* New York: Abrams, 2001 [SB470.5 .R64 2001]

Treib, Marc, editor. *The Architecture of Landscape:1940-1960*. Philadelphia: University of Pennsylvania Press, 2002

Treib, Marc, editor. *Modern Landscape Architecture: A Critical Review* Cambridge, MA: The MIT Press, 1993 [SB469.23.M64 1993]

Waldheim, Charles. *The Landscape Urbanism Reader*. New York: Princeton Architectural Press, 2006

Walker, Peter and Melanie Simo. *Invisible Gardens: the Search for Modernism in the American Landscape*. Cambridge, MA: The MIT Press, 1994. [SB470.5.W34]

Way, Thaïsa. *Unbounded Practice: Women and Landscape Architecture in the Early Twentieth Century*. Charlottesville: University of Virginia Press, 2009

Faculty:

Dorothee Imbert, Professor, Chair of Landscape Architecture

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

ARCHITECTURE 575 – Painting Into Architecture: Constructing Modern Space

3 credits SPRING 2011

Course Description:
A graduate seminar exploring the rich tradition within Modernism since 1900, where shared concepts of space, order and perception have been engaged in parallel developments in the pedagogy and practice of painting and architecture. Fulfills M.Arch History/Theory distribution requirement.

Course Goals & Objectives:
1. The course involves an examination of shared principles between painting and architecture through their *educational deployment* in selected schools of architecture around the world, as well as in their *practical implications and applications*, exemplified through a series of selected pairings of architects and painters, from the early Modern period to contemporary practice.
2. Three types of parallels between individual painters and architects are examined within the Modern tradition: *parallels in practice*, an actual relationship of contemporary equals; *parallels across time*, an actual albeit one-way relationship of chronologically distant practitioners; *parallels of principle*, a purely speculative relationship of contemporary equals on non-crossing paths.
3. Students will examine the disciplinary tradition in which each of the paired painter-architect and the leading figures in the schools works; by whom were they trained or influenced in their education and early career; whose work (past or present) do they use as inspiration and measure for their own recent or mature works; to which "school" of art or architecture do they consider themselves a part.
4. The focus of the course is on the analytical drawing of parallels in principle between the architect and artist; or an analysis of the principles emerging from one discipline, painting, which have been transformed into educational methods in the other discipline, architecture. Such parallels in principles include, but are not limited to, shared concepts of Modern *space*, *order*, and *perception*. An analysis of the paintings, buildings, or educational programs, as well as analysis of the author's statements regarding their inspirations, the relations between their own work and other art and architecture, and the larger spatial conceptions underlying their work. What part did/do the subjects play in the Modern tradition, which at its beginning was conceived as an integration and engagement of all the arts?

Student Performance Criterion Addressed:

A.1 Communication Skills	A.10 Cultural Diversity
A.3 Visual Communication Skills	A.11 Applied Research
A.5 Investigative Skills	C.1 Collaboration
A.8 Ordering System Skills	C.2 Human Behavior
A.9 Historical Traditions and Global Culture	C.8 Ethical and Professional Judgment

Topical Outline:
Research (40%), Presentation (40%), Discussion (20%).
Students, working in teams of two, make two in-class presentations, one each on an example of *practical implications and applications* and *educational deployment*; and summary research papers. These presentations include brief biographies of the primary subjects; positioning subjects within their disciplinary tradition; overview of the development of work or pedagogy; and the analytical drawing of parallels, and identification of shared principles, between these different modes of design.

Prerequisites:
Concepts and Principles, Architectural History I and II, or equivalent course waivers.

Textbooks/Learning Resources:
Selected readings, including: *Transparency: Literal and Phenomenal*, Rowe and Slutzky; *Structure in Art and Science*, Kepes, ed.;*The Thinking Eye*, Klee; *The Arts at Black Mountain College*, Harris; *The DeStijl Environment*, Troy; *Painting as Model,* Bois; *Constructive Concepts*, Rotzler; *Architecture and Cubism*, Troy and Blau, ed. *To Open Eyes: Josef Albers*; *The Moment of Cubism*, Berger.

Faculty: Robert McCarter, Ruth and Norman Moore Professor of Architecture

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ARCHITECTURE 4782 - MODERN ARCHITECTURE IN ST. LOUIS

3 credits **SPRING 10**

Course Description:

This seminar is intended to develop understanding of the history of modern architecture in the St. Louis area from 1930 to the present.

Course Goals & Objectives:

Using readings, class discussions, site visits, and lectures, students will be expected to research a local building, project, or local architectural direction in depth, and make presentations about the topic over the course of the term.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.5. Investigative Skills
A.9. Historical Conditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research
C.1. Collaboration
C.6. Leadership
C.9. Community and Social Responsibility

Topical Outline:

Introduction to the course	10%
Overview of the history of the St. Louis area before 1904	10%
Overview of the history of the St. Louis area in the early 20th century	10%
Modern architecture in Europe in the 1920s and 1930s	10%
Tour: Modern Architecture in St. Louis	10%
Antecedents and Parallels to St. Louis modernism	10%
National and local urban transformation and the JNEM (Jefferson National Expansion Memorial) Competition, 1936-48	5%
Postwar St Louis suburbanization and religious architecture	5%
Urban clearance, rebuilding and “renewal” in St. Louis	10%
Washington University School of Architecture and the international architectural scene in the 1960s	10%
Retrospect: modern architecture in St. Louis in historical perspective	10%

Prerequisites:

Concepts & Principles, Architectural History I and II, or equivalent course waivers.

Textbooks/Learning Resources:

Eric Mumford, ed., *Modern Architecture in St. Louis* (St. Louis/Chicago: Washington University School of Architecture and University of Chicago Press, 2004).

Faculty:

Eric Mumford, Professor

ARCHITECTURE 454 - PUBLIC SPACE AND CITY LIFE

3 credits **SPRING 11**

Course Description:

This seminar will investigate the theoretical framework and practice of various contemporary discourses on public space in order to reveal the implicit intellectual frameworks and practices.

Course Goals & Objectives:

To develop and test a conceptual framework for explaining the dynamics of the public realm and spatial implications thereof in order to define a foundation for action in architecture and urban design.

Student Performance Criteria Addressed :

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.7. Use of Precedent
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research
C.1. Collaboration
C.2. Human Behavior
C.8. Ethics and Professional Judgment
C.9. Community and Social Responsibility

Topical Outline:

Theories of the Public Realm	55%
History & Evolution of Public Space	15%
Public Space Analysis/Mapping	15%
Design Strategies for Public Space	15%

Prerequisites:

None.

Textbooks/Learning Resources:

Gehl, Jan . Life Between Buildings: Using Public Space . Arkitektens Forlag, 1996.
Ghent Urban Studies Team . The Urban Condition: Space, Community and Self in the Contemporary Metropolis. 010 Publishers, Rotterdam 1999.
Hajer, M & Reijndorp, A .In Search of New Public Domain . Nai Publishers, Rotterdam, 2001.
Lofland, Lyn . The Public Realm: Exploring the City's Quintessential Social Territory Aldine De Gruyter, New York, 1998.
Mitchell, Don. The Right to the City: Social Justice and the Fight for Public Space . The Guilford Press, New York, 2003.
Oldenburg, Ray.The Great Good Place . Marlow & Company, New York, 1999.

Faculty:

John Hoal, Associate Professor

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

ARCHITECTURE 455A - URBAN BOOKS: IMAG(EN)ING ST. LOUIS

3 credits **FALL 04, 05, 06, 07, 08, 10, 11**

Course Description:

Interdisciplinary seminar and workshop co-taught with Jana Harper (senior lecturer Art School) including urban theory readings, book design, and the production of individual artists' books.

Course Goals & Objectives:

Introduce architecture and art students to scholarly research in urbanism and the creation of visual narratives focused on the discussion of contemporary issues affecting metropolitan Saint Louis.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.4. Technical Documentation
A.5. Investigative Skills
A.7. Use of Precedents
A.8. Ordering Skills
A.10. Cultural Diversity
A.11. Applied Research

Topical Outline:

Conceptual Skills	40%
Design Skills	20%
Drawing and Representation Techniques	35%
Presentation Skills	5%

Prerequisites:

None

Textbooks/Learning Resources:

A series of one hundred artists' books purchased with course development grant for the University's Special Collections along with additional texts regarding each semester's topic.

Faculty:

Zeuler Lima, Ph.D., CREA-BR, Associate Professor (Architecture and Urbanism)
Jana Harper, Senior Lecturer (Book and Printmaking)

ARCHITECTURE 525K - LAND ARCH URB

3 credits **SP 09, 10, FL 11**

Course Description:

This course will explore recent theories and practices related to specific and deliberate blurring, hybridization, and expansion of the traditional semantic and historical categories of *landscape*, *architecture*, and *urbanism* in an attempt to confront changing situations, environments, and cultures.

Course Goals & Objectives:

Explore the cross-disciplinary interactions of architecture, landscape architecture, urban design and art.
Explore the formative ideas of Landscape Urbanism
Explore the changing theoretical and cultural dimensions of nature, city, and building.

Student Performance Criterion Addressed (list number and title):

A1. Communication Skills
A2. Design Thinking Skills
A3. Visual Communication Skills
A.5. Investigative Skills
A.7. Use of Precedents
A.9. Historical Traditions & Global Culture
A.10. Cultural Diversity
A.11. Applied Research
C.1. Collaboration
C.2. Human Behavior
C.8. Ethics & Professional Judgment
C.9. Community & Social Responsibility

Topical Outline:

Research (40%), Presentation (40%), Discussion (20%).

Prerequisites:

None

Textbooks/Learning Resources: select readings

"Programming the Urban Surface", Alex Wall, in *Recovering Landscape, Essays in Contemporary Landscape Architecture*, (ed. James Corner), Princeton Architectural Press, NY, 1999 (233-250)."Sculpture in the Expanded Field", 1978, in Krauss, Rosalind E., *The Originality of the Avant-garde and Other Modernist Myths*, The MIT Press, Cambridge, MA, 1986."Weak Architecture", (Chapter 4, pp.57-72), in Sola-Morales, Ignasi, *Differences, Topographies of Contemporary Architecture*, The MIT Press, Cambridge, MA, 1997."Decamping Detroit", Charles Waldheim and Marili Santos-Munne, in *Stalking Detroit*, (ed. Daskalakis, Waldheim, Young), Actar, Barcelona, Spain, 2001."Landscraping", James Corner, in *Stalking Detroit*, (ed. Daskalakis, Waldheim, Young), Actar, Barcelona, Spain, 2001.
"Projecting Detroit", G. Daskalakis and O. Perez,, in Stalking Detroit, (ed. Daskalakis, Waldheim, Young), Actar, Barcelona, Spain, 2001.
Points and Lines, Diagrams and Projects for the City, Stan Allen, Princeton Architectural Press, NY, 1999, Chapter 2: Infrastructural Urbanism (46-89); Chapter 3: Field Conditions (90-137).

Faculty: Associate Professor Gia Daskalakis

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Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

ARCHITECTURE 564A - Urban Development Seminar

3 credits **F 03, 04, 05, 06, 07, 09, 10**

Course Description:
The Urban Issues Symposium is an interdisciplinary project based course which prepares students for professional practice within the context of urban/community development. Students work in teams to respond to actual requests for proposals (RFPs) for community development projects in the St. Louis region. Faculty members and outside speakers lecture on multidisciplinary aspect of neighborhood development, such as tax credit financing, neighborhood collaborative planning and asset building, design, social issues, private-public partnerships, the place of government and nonprofits, and the role of the University as an anchor community institution.

Course Goals & Objectives:
• Understand the roles of the different disciplines within the context of community development
• Understand the process for engaging with a community entity to create measurable and sustainable community change/development
• Reinforce the holistic nature of community development – physical, structures, the people, and the relationship to the forces around it – public, political, cultural, historic, legal, financial, environment
• Inspire/encourage the students career goals, leadership, creativity
and to learn new skills

Student Performance Criterion Addressed (list number and title):
A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.10.Cultural Diversity
A.11.Applied Research
B.7. Financial Considerations
C.1. Collaboration
C.2. Human Behavior
C.3. Client Role in Architecture
C.5. Practice Management
C.6. Leadership
C.7. Legal Responsibilities
C.8. Ethics and Professional Judgment
C.9. Community and Social Responsibility

Topical Outline:
Critical Thinking Skills (40%)
Research Skills (30%)
Presentation Skills – Written and Verbal (20%)
Participatory Skills / Discussions, Seminar Leadership, etc. (10%)

Prerequisites: None

Textbooks/Learning Resources:
Select list: (Washington, D.C.: Bookings Institution Press, 1999), 242-291. See Topic 1, (Chapel Hill: University of North Carolina Press, 1985), (Washington, D.C.: Bookings Institution Press, 1999), 242-291. See Topic 1(Chapel Hill: University of North Carolina Press, 1985), Reconstructing Architecture Critical Discourses and Social Practices, Thomas A. Dutton and Lian Hurst Mann, editors: Second Nature: On the Social Bond of Ecology and Architecture.

Faculty:
2010: Bruce Lindsey, Professor, Barbra Levin, Washington University St. Louis University Patty Hagen, School of Public Policy, Dan Sise, St. Louis University Law School,
2009: Jodi Polzin, Visiting Assistant Professor, Barbra Levin, Washington University St. Louis University Patty Hagen, School of Public Policy, Dan Sise, St. Louis University Law School,

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Washington University in St. Louis

ARCHITECTURE 564J - Sustainability in the Built Environment: Infrastructure, Landscapes, and Buildings

3 credits **SPRING 08, 09 & FALL 10**

Course Description:

This seminar will investigate the contemporary debates and practices with respect to the design and development of sustainable cities, communities and environments.

Course Goals & Objectives:

To develop and test a conceptual framework that is responsive to global environmental, social and economic conditions within the everyday built environment in order to define an appropriate foundation for action in planning and urban design.

Student Performance Criterion Addressed :

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.7. Use of Precedent
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research
C.1. Collaboration
C.2. Human Behavior
C.8. Ethics and Professional Judgment
C.9. Community and Social Responsibility

Topical Outline:

Need for Urban Sustainability	10%
Theories/Approaches towards Urban Sustainability	40%
Practices of Urban Sustainability	50%

Prerequisites:

None

Textbooks/Learning Resources:

Farr, D . Sustainable Urbanism: Urban Design with Nature
Portney, K . Taking Sustainable Cities Seriously
Wheeler, S & Beatley, T . The Sustainable Urban Development Reader

Faculty:

John Hoal, Associate Professor

ARCHITECTURE 652 - METROPOLITAN DEVELOPMENT

3 credits **SPRING 10, 11**

Course Description:

This course explores planning strategies for American urbanism including an introduction to the legal, governmental, social and financial/ economic frameworks guiding the design and development of American cities.

Course Goals & Objectives:

Students will gain a balanced understanding of the dynamic factors and forces influencing the scope and quality of implementation of the urbanistic project within both the public and private sectors, at regional and local scales. The material and format of the course is structured to explore how urban projects are directed, conceived, tested, legislated, regulated, financed, envisioned, vetted and realized in the American city.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.8. Ordering Systems Skills
A.10. Cultural Diversity
B.7. Financial Considerations
C.1. Collaboration
C.2. Human Behavior
C.3. Client Role
C.4. Project Management
C.5. Practice Management
C.6. Leadership
C.7. Legal Responsibilities
C.8. Ethics and Professional Judgment
C.9. Community and Social Responsibility

Topical Outline:

Structures of government and governance	10%
Public Policy and Land use law	20%
Real Estate Development and Finance pro-formas	30%
Economic Development	10%
Community development	20%
Public process, social justice	10%

Prerequisites:

None

Textbooks/Learning Resources:

Various text articles and chapters; local and national newspapers, weblogs, personal interviews and professional speakers from the field.

Faculty:

Patricia Heyda, Assistant Professor (2011)
Wayne Mortensen, Lecturer (2009, 2010)

ARCHITECTURE 654D - METROPOLITAN LANDSCAPES

3 credits **FALL and SPRING 09, 10, FALL 11**

Course Description:

The course will discuss the Urbanist's practice in four aspects: landscape planning, landscape ecology, green infrastructure and landscape urbanism.

Course Goals & Objectives:

The weekly classes combine theory, technical knowledge and practice and asks students to apply theory directly to design.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.4. Technical Documentation
A.5. Investigative Skills
A.7. Use of Precedents
A.8. Ordering System Skills
A.9. Historical Traditions & Global Culture
A.10. Cultural Diversity
A.11. Applied Research
B.3. Sustainability
B.4. Site Design
B.8. Environmental Systems
C.1. Collaboration
C.2. Human Behavior
C.9. Community & Social Responsibility

Topical Outline:

Technical Application of Information	30%
Theoretical Readings and Responses	30%
Research	15%
Design	25%

Prerequisites:

None

Textbooks/Learning Resources:

Course reader includes primary and secondary sources selected by the instructor.

Faculty:

Carolyn Gaidis, Lecturer

ARCHITECTURE 656 - METROPOLITAN URBANISM

3 credits **FALL 09, 10, 11**

Course Description:

This course investigates the morphology and morphogenesis of the contemporary American urban landscape; its changing pattern, form and uses from the central city to the rural fringe.

Course Goals & Objectives:

The objective of the course is to understand the indeterminate complexity and richness of morphological layering and traces in the urban landscape as a basis for critical practice.

Student Performance Criterion Addressed:

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.8. Ordering Systems Skills
A.9. Historical Traditions & Global Culture
C.1. Collaboration
C.2. Human Behavior
C.8. Ethics and Professional Judgment
C.9. Community and Social Responsibility

Topical Outline:

Theories of urban form	10%
Transformation of American urban patterns and spatial conditions	40%
American urban social history	20%
American urban economic/political history	20%
Methodologies of mapping /urban formal analysis	10%

Prerequisites:

None

Textbooks/Learning Resources:

Various text articles and chapters; a film; direct exploration and documentation in the city.

Faculty:

Patricia Heyda, Assistant Professor (2010, 2011)
Eric Mumford, Professor (2009)

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Washington University in St. Louis

ARCHITECTURE 657- CONTEMPORARY PRACTICES IN SUSTAINABLE URBANISM

3 credits **SPRING 11**

Course Description:

This seminar will investigate those *contemporary practices* of Sustainable Urbanism that exemplify a concern for locality, place, culture, community and authenticity.

Course Goals & Objectives:

To review and test various sustainable urbanism frameworks, methodologies and practices through the analysis of and creation of a Sustainability Plan for the Parkview Gardens neighborhood.

Student Performance Criterion Addressed :

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.7. Use of Precedent
A.9. Historical Traditions and Global Culture
A.10. Cultural Diversity
A.11. Applied Research
C.1. Collaboration
C.2. Human Behavior
C.8. Ethics and Professional Judgment
C.9. Community and Social Responsibility

Topical Outline:

Need for Urban Sustainability	10%
Theories/Approaches towards Urban Sustainability	40%
Practices of Urban Sustainability	50%

Prerequisites:

None.

Textbooks/Learning Resources:

Newman, P & Jennings, I . Cities as Sustainable Ecosystems: Principles and Practices Island Press, Washington DC, 2008

James, S & Lahti, T . The Natural Step for Communities: . How Cities and Towns can Change to Sustainable Practices . New Society Publishers, Canada 2004

Frank, L; Engelke, P, & Schmid, T. Health and Community Design: The Impact of the Built Environment on Physical Activity . Island Press, Washington DC, 2003

Farr, D .Sustainable Urbanism: Urban Design with Nature . John Wiley & Sons, New Jersey, 2008.

Walker, B & Salt, D . Resilience Thinking: Sustaining Ecosystems and People in a Changing World . Island Press, Washington DC, 2006

Faculty:

John Hoal, Associate Professor

IV.4.5 Faculty Resumes

Janet S. Baum, AIA

Senior Lecturer

Courses Taught:
Arch 568A: The Architecture of Science – Graduate General Elective (Fall 09, 10, 11)
Arch 568B: The Architecture of Medicine - Graduate General Elective (Spring 10, 11)
Arch 568C: Public Health and the Built Environment - Graduate General Elective (Spring 11)

Educational Credentials:
Harvard University, GSD, awarded the school medal,1970
Washington University, Bachelor of Science in Architectural Sciences, 1966

Teaching Experience:
Harvard University, School of Public Health, Continuing Professional Education Program, Instructor, 1983 – now. Co-Director of 2 courses,2008 – now.
Harvard University, Graduate School of Design, 1981-2, Instructor
Instructor of several courses for American Institute of Architects, American Biological Safety Association, American Chemical Society, and Society for College and University Planners at many national conventions.

Professional Experience:
Washington University in St. Louis (2)
Health, Education + Research Associates, Inc., St. Louis (12)
Hellmuth Obata Kassabaum, St. Louis, (4.5)
Payette Associates, Inc., Boston, (8)
Harvard Medical School, Boston, (12)
Stifter & Baum Architects, Cambridge, (3)
Sert-Jackson Associates, Cambridge, (1)
Hausner & Macsai, Chicago, (1)
Years of employment (x)

Licenses/Registration:
Illinois, Massachusetts, Missouri, New York, and NCARB

Selected Publications and Recent Research:
Guidelines for Laboratory Design: Health, Safety, and Environmental Considerations, DiBerardinis, Baum, First, Gatwood, Seth, editions 1, 2, 3, and 4, Wiley Interscience, New York City, 1987, 1994, 2001, 2011.
Manual on Biosafety for Laboratories Involved in Tuberculosis Testing, Allen and Baum, World Health Organization, Geneva, 2010.
Promoting Chemical Safety and Security in Developing Countries, National Research Council, National Academies Press, Washington DC, 2010.
Handbook on Chemical Health and Safety, Alaimo, editor, Oxford U. Press, 2001.
Guidelines for Planning and Design of Biomedical Research Laboratory Facilities, AIA Press, Washington DC, 1999.
Laboratory Design, Renovation and Construction: Participants, Process and Product, National Academy Press, Washington, DC, 1999

Professional Memberships:
American Institute of Architects, Academy of Architecture for Health, American Chemical Society (Fellow, Division of Chemical Health and Safety), Saint Louis Academy of Science (Board Member), WUSTL National Council

Andrew Cruse

Visiting Assistant Professor

Courses Taught :
Arch 419: Architectural Design III - Graduate Core Design Studio (Fall 10)
Arch 438: Environmental Systems I – Graduate Required Course (Fall 10, Spring 11)
Arch 616: Architectural Design VII, Degree Project – Graduate Option Studio (Spring 10, 11)

Educational Credentials:
Rice University, Master of Architecture, 1998
Fulbright Fellowship, Barcelona Spain, 1997
Columbia University, Bachelor of Art in Art History, 1993

Teaching Experience:
Washington University in St. Louis, 2010-present, Visiting Assistant Professor
Northeastern University, 2003-2005, Lecturer
Rhode Island School of Design, 2003, Lecturer

Professional Experience:
Machado and Silvetti Associates, Boston, MA, 2000-2010
Lutsko Associates, San Francisco, CA, 1998-2000

Licenses/Registration:
Current: California, Maryland
Lapsed: Massachusetts, New York, Connecticut, Arkansas, Wisconsin

Selected Publications and Recent Research:
N/A

Professional Memberships:
AIA, NCARB, LEED AP

Gia Daskalakis

Associate Professor

Courses Taught:
Arch 311-411: Architectural Design - Undergraduate Core Studio (Fall 09, 10)
Arch 312-412: Architectural Design II – Undergraduate Option Studio (Spring 10, 11)
Arch 405D: Furniture Design – Graduate General Elective (Fall 09)
Arch 525K: LAND Arch URB: landscapearchitectureurbanism – Graduate Urban Issues Elective (Spring 10, 11, Fall 10)

Educational Credentials:
Universidad Politecnica de Catalunia, Barcelona, Spain, Diploma de Posgrado del Tercer Ciclo, 1988
Rhode Island School of Design, Bachelor of Architecture, 1983
Rhode Island School of Design, Bachelor of Fine Arts, 1982

Teaching Experience:
Washington University in St. Louis, 2001-present, Associate Professor
Washington University in St. Louis, 1998-99, Assistant Professor
Washington University in St. Louis, 1995-98, Visiting Assistant Professor
University of Michigan, 1993, Visiting Assistant Professor (Muschenheim Fellow)
Parsons School of Design, 1991, Adjunct Faculty in Architectural History and Theory
New Jersey Institute of Technology, 1989-90, Adjunct Design Faculty
Boston Architectural Center, 1985-86, Adjunct Design Faculty

Professional Experience:
Das : 20 Architecture Studio, Principal, 1988-Pres.
Freelance Architect, 1988- 92
Schwartz / Silver Architects, Boston, MA, Project Architect, 1984-86

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Human Cities, Celebrating Public Space, Edited by Golicnik Marusic, Matej Nicsic and Lise Coirier, unstboek Stichting, 2010
Fellowships in Architecture, University of Michigan, Oro Editions, San Rafael, CA, 2009
Stalking Detroit, edited by Gia Daskalakis, Charles Waldheim, Jason Young, 2001
ACTAR, Barcelona, Spain, 2001 (English and Spanish language editions)
"Transparencias Interiores", Summa (Buenos Aires, Argentina), Issue #47, (Oficinas de la Tercera Ola), February / March, 2001.
"The Space of the Post-Industrial City"; "Modernity and the Avant-Garde"; "Common Consciousness in Theory and Practice"

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Washington University in St. Louis

Kathryn Dean

Professor and Director of Graduate Programs

Courses Taught:
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Spring 09, 10)
Arch 616: Architectural Design VII, Degree Project – Graduate Option Studio (Fall 10)

Educational Credentials:
American Academy in Rome, Rome Prize Fellowship, 1987
University of Oregon, Master of Architecture, 1983
North Dakota State University, Master of Architecture, 1981

Teaching Experience:
Washington University in St. Louis, 2008-present, Professor and Director of Graduate Programs
Columbia University, 2000-2008, Assistant Professor
Harvard University, 1998-1999, Visiting Assistant Professor
Columbia University, 1991-1998, Adjunct Assistant Professor
City College of New York, 2005 & 2008, Distinguished Visiting Professor
University of Michigan, 2004, Max Fischer Distinguished Visiting Professor
University of Virginia, 2002, Michael Shure Distinguished Visiting Professor
University of Florida, 1992 & 1995, Distinguished Visiting Professor

Professional Experience:
Dean/Wolf Architects, New York, New York, 1991-present
Kohn Pedersen Fox Associates, New York, New York, 1984-1986 and 1998-1991
Cooper Eckstut, New York, New York, 1983-1984
Martha Schwartz, Landscape Architect, New York, New York, 1983

Licenses/Registration:
Architect #021866, New York State (1989)

Selected Publications:
Dean/ Wolf Architects: Constructive Continuum, Princeton Architectural Press. 2010.
Constructive Practices, Between Economy and Desire, Columbia Books on Architecture. 2008.
"Virtual Light Loft", Interior Architecture: From Brief to Build, Lawrence King Publishing, 2010.
"Contracted Dwelling", ha House, Pace Publishing, 2009.
"Collins Loft", 25 Apartments and Loft under 2500 Square Feet, Trulove, 2006. 218-223.
"Soho Skyline Loft", 25 Apartments and Lofts under 2500 Square Feet, Trulove,2006. 194-201.
"Soho Skyline Loft", New Domestic Interiors, Carlos Broto, 2005.162-169.
"Reading Playground", The Library Book: Design Collaborations in the Public Schools, Princeton Architectural Press,2009
"2009 R+D Awards: Dynamic Descent", Architect, August, 2009, 52-53.
"Virtual Light Loft", Architectural Record, September 2008, 106-111.
"Why Fight City Hall?, Oculus, Summer 2006, 22-23.
"The Library Goes Back to School", Architectural Record, September 2005, 86-92.

Selected Awards and Honors:
AIA NYC Honor Award, Inverted Warehouse/Townhouse, 2010
AIA NYC Merit Award, Implied Rotation Townhouse, 2010
AIA NYC Honor Award, Operable Boundary Townhouse/Garden, 2007

Professional Memberships:
American Institute of Architects

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

Paul J. Donnelly

Rebecca & John Voyles Professor of Architecture

Courses Taught:
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Spring 10, 11)
Arch 616: Architectural Design VII, Degree Project – Graduate Option Studio (Fall 09)
Arch 538C: Advanced Building Systems – Graduate Required Course (Fall 10, 11)
Arch 347: Building Systems II – Graduate Required Course (Fall 09)
Arch 538A: Technology Transfer Seminars – Graduate Technology Elective Seminar (Spring 10, 11)
Independent Studies/Research

Educational Credentials:
Boston Architectural College, Bachelor of Architecture
Columbia University, Master of Science in Engineering Mechanics
McGill University, Graduate Studies in Structural Engineering
Northeastern University, Bachelor of Science in Structural Engineering

Teaching Experience:
Washington University in St. Louis, Professor of Architecture, 1995-present
MIT, Department of Architecture, Visiting Professor (Spring 03); Visiting Scholar (Fall 02); Visiting Associate Professor, 1995-1996; Visiting Lecturer, (Fall 94): Visiting Scholar, (Spring 94)
Roger Williams University, Professor of Architecture, 1991 -1996; Architecture Faculty, 1985-1996

Professional Experience:
HOK Architects: Director of Material Science Knowledge Group and Architect for Advanced Technologies, 2004-Present
Goody Clancy & Associates: Consulting Design Architect, 2000-2003
Paul J. Donnelly Architects: Principal, 1978-2001

Licenses/Registration:
NCARB Certified; Registered Architect, Massachusetts & Florida; Registered Professional Engineer, Massachusetts; LEED AP

Selected Publications and Recent Research:
"Reducing Energy Demand in Commercial Buildings: Balancing Convection and Radiant Cooling"
Proc. of McDonnell Academy's 3rd International Symposium on Energy and the Environment 2010
"PCM Membranes in Architectural Enclosures" Donnelly, P., Becker, R., Fedorko, D.
Proc. of McDonnell Academy's 2nd International Symposium on Energy and the Environment 2008
Moscow Hotel Design Architects: Sung Ho Kim & Paul J. Donnelly,
Spatial Practice, Axi:0me ORO editions 2009
"American Beauty" Peter MacKeith & Paul Donnelly, Co-Authors
The Architects Journal 2002
Building Integrated Photovoltaic Competition, 1st Place Entry, Andrew Scott & Paul Donnelly
Dimensions of Sustainability 1999. Routledge Press
Building Research & Information 1998 Architects: London, U.K.
Photovoltaics in Buildings 1997 National Renewable Energy Laboratory
BIPV Multimedia Program 1996 NERL/AIA Research Foundation
Architecture Magazine 1996
AIArchitect 1996

Professional Memberships:
Memberships: *College of Fellows, American Institute of Architects (FAIA); American Society of Civil Engineers (M.ASCE); Architectural Engineering Institute (AEI); Chi Epsilon, National Civil Engineering Honor Society; US Green Building Council*

Deborah Fausch

Visiting Professor

Courses Taught:
Arch 457A: Architecture and Urbanism from the 1960s – Graduate Urban Issues Elective (Spring 11)

Education:
Princeton University, PhD in History, Theory, and Criticism of Architecture, 1999
New School for Social Research, Master of Arts in Liberal Studies, 1988
University of Minnesota, Bachelor of Architecture, 1978
Brown University, Graduate study in Physics, 1972-73
Carleton College, Bachelor of Arts in Physics, 1972

Teaching and Administrative Experience:
Washington University School of Architecture, 2011
University of Illinois Chicago, School of Architecture, 2007-2010
University of Illinois Chicago, School of Architecture, Associate Director of Undergraduate Studies, 2008-2009
University of Illinois Chicago, Department of Art History, 1997-2007
Parsons School of Design, Department of Architecture and Environmental Design, NY, 1992-97

Professional Experience:
Edwin Schlossberg Inc., New York, Designer, Project Manager, 1986-87
Project for Public Spaces, New York, Designer, Writer and Editor, 1985-86
Ritter Suppes Plautz Architects Ltd., Minneapolis, Project Designer, Project Architect, 1982-85
Design Through Research Inc., Minneapolis, Designer, Project Architect, 1978-82
Seward West Redesign, Minneapolis, Project Architect, 1978
St. Paul Planning Department, St. Paul, Assistant Planner, 1977

Licenses/Registration:
Minnesota, 1982

Benjamin Fehrmann

Lecturer

Teaching Area:
Arch 419: Architectural Design III – Graduate Design Studio (Fall 09, 10)
Arch 580: Design Thinking – Graduate Required Course (Spring 11, Summer 11)

Education:
University of Kansas, Bachelor of Architecture, 1998

Teaching and Administrative Experience:
Washington University in St. Louis, 2010-Present, Lecturer
Washington University in St. Louis, 2009, Visiting Assistant Professor
University of Kansas School of Architecture, 2007-2009, Lecturer in Architecture teaching graduate level design studio ARCH 608

Professional Experience:
Independent Practice; 2007-Present
Major Projects Include the Ballston Substation Perimeter Enclosure, the Mehringer Residence, the Novus International Research Farm, the 1318 Hebert Gallery, LaGuardia Airport Concept Design (as consultant to Grimshaw Partners and HOK), Arenus/Spectrum Corporate Headquarters, the Central West End Metro Station (sculpture commission), and public art installation on South Grand Boulevard in St. Louis, MO.
Forum Studio; 2006-2007: Senior Designer
Major Projects Include the Novus International Headquarters, The Memphis Bioworks Foundation Masterplan, and The Arthouse Development in Grand Center
HOK; 2000-2006: Senior Designer
Major projects include The Indianapolis International Airport, APM Stations for Dulles International Airport, The Lambert International Airport Masterplan, The Chelsea Arts Tower, and Old National Bancorp Headquarters
Cannon Design; 1998-2000: Intern Architect
George Butler Associates; 1997-1998: Intern Architect/Designer

Awards:
AIA St. Louis Merit Award for Unbuilt Architecture: Rudd Equipment Company, St. Louis, MO
AIA St. Louis Merit Award for Unbuilt Architecture: College of Lake County, Grayslake, IL
AIA Indiana Award for Architecture: Old National Bancorp Headquarters, Evansville, IN
AIA St. Louis Honor Award for Unbuilt Architecture: Indianapolis International Airport, Indianapolis, IN
AIA Central States Merit Award for Architecture: George E. Wolf Parking Structure, Kansas City, MO
AIA St. Louis Merit Award for Unbuilt Architecture: Tyson Foods Prototype Façade, various locations
AIA St. Louis Merit Award for Drawing: Pavilion, St. Louis, MO
AIA St. Louis Honor Award for Architecture: Indianapolis International Airport, Indianapolis, IN
AIA St. Louis Honor Award for Architecture: Novus International Headquarters, St. Charles, MO

Jim Fetterman, FASLA

Lecturer

Courses Taught:
Arch 461L: Landform & Grading – Graduate Landscape Elective (Fall 10)
Arch 465L: Landscape Technology – Graduate Landscape Elective (Spring 11)

Educational Credentials:
Kansas State University, Bachelor of Architecture, 1974

Teaching Experience:
Washington University in St. Louis, 2010 to Present, Lecturer

Professional Experience:
James Fetterman, Landscape Architect, 2009 – Present
HOK Planning Group, Hellmuth, Obata + Kassabaum, 1976 - 2008

Licenses/Registration:
Registered Landscape Architect: Kansas 280, Missouri, 2007004822, Indiana, LA20800145

Selected Publications and Recent Research:
N/A

Professional Memberships:
American Society of Landscape Architects, Full Fellow

Iain Fraser

Professor

Courses Taught:
Arch 311 Undergraduate Core Studio (Fall 09, 10)
Arch 312-412 Undergraduate Option Studio (Spring 10, 11)
Arch 471A Continuity and Transformation in Architecture and Urban Form - Graduate Elective
Arch 470A Extreme Architecture – Graduate Elective (Spring 10)

Educational Credentials:
BArch North Carolina State University,
MArch Washington U

Teaching Experience:
Washington University, School of Architecture
Miami University of Ohio, Architecture Dept.
School of Arch

Professional Experience:
Karleff Association, Toronto, Ontario
RJ CecilPartners, London UK
Envirotek Inc., Raleigh NC
Fraser Thomson Assoc, Inc.; Iain Fraser Design, St. Louis MO

Licenses/Registration:
RA MO

Selected Publications and Recent Research:
Envisioning Architecture: An Analysis of Drawing with Rod Henmi;
Papers and lectures on drawing and its role in architecture;
Architectural and urban typology;
Incremantality in architecture and urbanism
Exhibitions at Sheldon Art Museum, St Louis, Hannibal Lagrange Gallery, Mo, Chesterfield Arts, Mo, Center for the Contemporary Arts, St Louis, Northwestern University, Chicago IL

Catalina Freixas

Senior Lecturer

Courses Taught:
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Spring 11)
Arch 111: Introduction to Design Processes I - Undergraduate Studio (Fall 09, 10)
Arch 317: Architectural Design I – Graduate Core Studio (Fall 09, 10)
Arch 323A: Architectural Representation I – Graduate Required Course (Fall 09, 10)
Arch 336C: Biomimicry: Towards a Sustainable Design – Graduate Technology Elective (Spring 10, 1
Arch 336B: Designing Sustainable Environments – Graduate General Elective (Spring 09, Summer 09, Fall 09, 10)
Summer Architecture Discovery Program (Summer 09, 10)

Educational Credentials:
University of Buenos Aires, Diploma in Architecture

Teaching Experience:
Washington University in St. Louis, 2004-present, Senior Lecturer
University of Buenos Aires, 2000-2002

Professional Experience:
Laulab, St. Louis, MO, 2005–present, Partner
Luchini AD, St. Louis, MO, 2004-present, Collaborator
Forum Studio, St. Louis, MO, 2005–2009, Project Designer
Raimist architecture, Inc., St. Louis, MO, 2004–2005, Assistant Architect
Baez, Carena, Grementieri Architects, Buenos Aires, Argentina, 2001-2002, Associate Architect
Balzola & Asoc. Buenos Aires, Argentina, 2001-2002, Associate Architect
AMB Contrucciones S.A., Buenos Aires, Argentina, 2001-2001, Associate Architect
Phonex-Isocor SA, Buenos Aires, Argentina, 1999-2001, Project Assistant
OOPS!, Buenos Aires, Argentina, 1997-2000, Intern Architect

Licenses/Registration:
Registered Architect, Buenos Aires, Argentina
LEED AP, USGBC

Selected Publications and Recent Research:
"Biomimicry: Towards a Sustain-Able Design", feactured by Karen Verbeek, Biomimicry & Industrial Deisng, Biomimicry Institute, June 2011
"Biomimicry: When architecture imitates life", featured by David Baugher, St. Louis Beacon, May 2011
"Biomimicry: Towards a Sustain-Able Design", Biomimicry in Higher Education Proceedings, Biomimicry Institute, March 2011
"Biomimicry: Towards a Sustainable Design", https://www.acsa-arch.org/adaview.aspx?pageid=573, ASCA, 2010
"Building Typologies", Researched and published under the Chair Prof. Scarone, School of Architecture, Design and Urbanism, University of Buenos Aires, FADU, 1995

Professional Memberships:
USGBC, S. Louis Chapter, St. Louis, MO, 2010-present
Sociedad Central de Arquitectos, Buenos Aires, Argentina, 1991–present

Carolyn Gaidis

Lecturer

Courses Taught:
Arch 552B: Site Planning – Graduate Required Elective (Fall 09)
Arch 711: Elements of Urban Design Studio (Fall 09, 10)
Arch 654D: Metropolitan Landscapes – Graduate Urban Issues Elective (Fall 09, 10, Spring 10)

Educational Credentials:
University of Pennsylvania, Masters of Landscape Architecture,1994

Teaching Experience:
Washington University in St. Louis, 2008-present
University of Pennsylvania, 1993-1994

Professional Experience:
L.A.N.D.+, LLC, Principal in Charge, 2009-Present
Forum Studio, Senior Associate, 2006-2009
Lewisites, Landscape Architect, 2000-2006
HOK, Landscape Architect, 1994-2000

Licenses/Registration:
Registered Landscape Architect
International Society of Arboriculture Certified Arborist

Selected Publications and Recent Research:
Project work shown in HOK Sustainable Design Book
Research on global warming and its consequences on current hardiness zone designations

Professional Memberships:
ASLA, ISA, CLARB, USGBC, ULI, ASSOCIATE AIA

John C. Guenther, FAIA, LEED AP

Lecturer

Courses Taught:
Arch 211: Introduction to Design Processes III – Undergraduate Core Studio (Fall 09, 10)
Arch 478A: Mid-Century Modernism in St. Louis 1930-1970 – Graduate History Theory Elective (Sprin 11)
Arch 305A: Special Topics Workshop: Exploring Methods for Transmitting Information – Graduate Masterclass (Fall 10)

Educational Credentials:
University of Kansas, Bachelor of Architecture, Thayer Medal for Design Excellence, 1976-77
University of Kansas, Bachelor of Environmental Design with Distinction, 1976
Edinburgh College of Art/Heriot Watt University, Edinburgh, Scotland, 3rd year Ewart Scholar,1974-75

Teaching Experience:
Washington University in St. Louis, 2009-present, College and Graduate School of Architecture & Urban Design, Lecturer
University of Kansas, School of Architecture & Urban Design, 1976-1977, Lecturer

Professional Experience:
John C. Guenther, FAIA, LEED AP, Design Consultant, 2009-present
Mackey Mitchell Architects, Principal & Design Partner, 1979-1982, 1984-2009
Henmi & Associates, 1982-1984
Design Build Architects, 1976-1979 (now Gould Evans Goodman Associates)
Peters Williams Kubota, Architects; 1976
Enderling Associates, Architects; 1974
Antoine & Associates, Civil Engineers; 1973

Licenses/Registration:
Registered Architect: Missouri, 1982
LEED™ Accredited Professional, 2.0, 2004

Selected Publications and Recent Research:
Schemata XVII Studio 804_08; Introduction by John C. Guenther, FAIA, LEED AP;
Title: Introduction to LEED Platinum Certification; Project: Sustainable Prototype 5.4.7 Arts Center, Greensburg, Kansas
Emerald Architecture: Case Studies in Green Architecture; Introduction: Robert Berkebile, FAIA; Author: Jessica Boehland; Publisher: GreenSource, McGraw-Hill Construction Publication; Project: Alberici Corporate Headquarters
Wildwood, Missouri: Its Origins, Environmental Codes and Planning Principles; Greening the Heartland 2008 Conference; Co-authors and co-presenters: John C. Guenther, FAIA, LEED AP, Jonathan Barnett, FAIA, FAICP, Joe Vujnich, Director of Planning and Parks, City of Wildwood, MO

Professional Memberships:
American Institute of Architects; College of Fellows (2010) for notable contributions to the advancement of the profession of architecture in design; Committee on Design; 1987 - present
St. Louis Chapter, American Institute of Architects; Design Awards Committee; 1987 - present
USGBC St. Louis Regional Chapter; 2005 – present; Green Schools Committee; 2007 – present
Society of Architectural Historians, Missouri Valley Chapter, Board President, 2010 - present
City of Wildwood, Missouri: Architectural Review Board; 1999 – present

Esley Hamilton

Lecturer

Courses Taught:
Arch 423: History of Landscape Architecture – Graduate History Theory Elective (Fall 10, 11)
Arch 664: Historic Preservation and Urban Design – Graduate General Elective (Spring 10, 11)

Educational Credentials:
University of Missouri-St. Louis, Doctor of Arts & Letters Honoris Causa, 2009
University of Wisconsin-Madison, Master of Science in Urban and Regional Planning,1976
Syracuse University, Bachelor of Arts in English Literature, 1967

Teaching Experience:
Washington University School of Architecture, 1992-present, Lecturer
Maryville College, 1977-1995, Adjunct Instructor

Professional Experience:
St. Louis County Department of Parks and Recreation, Preservation Historian, 1977-present,
Preservation Consultant, University City, Hannibal, Clarksville, 1978-1995

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Westmoreland and Portland Places, U. of Mo Press, 1988 (co-author)
The Way We Came: A Century of the AIA in St. Louis, 1991, co-author)
The Past In Our Presence: Historic Buildings in St. Louis County, 1996, editor
Newsletter of the St. Louis Chapter, Society of Architectural Historians, 1997-present, editor

Professional Memberships:
American Institute of Architects, St. Louis Chapter, honorary associate member, 1991
Society of Architectural Historians, national and St. Louis chapter
National Trust for Historic Preservation
Alliance for Historic Landscape Preservation
National Association for Olmsted Parks, board member 2001-present
Steedman Architectural Library, St. Louis Public Library, advisor, 2002-present

Liane A Hancock

Senior Lecturer

Courses Taught:
Arch 434M: Materials Research Seminar – Graduate Technology Elective (Fall 09, 10)
Arch 434L: Materials Study: Concrete – Graduate Technology Elective (Spring 10)

Educational Credentials:
Columbia University, Master of Architecture, 1996
University of Texas at Austin, Master of Architecture Candidate, 1993
Massachusetts Institute of Technology, Bachelor of Science in Art and Design with concentrations in Building Technology and Literature, 1990

Teaching Experience:
Washington University in St. Louis, 2002-2011, Senior Lecturer

Professional Experience:
Independent Work:
Designer and Curator: Landscape Materials Exhibit, Sheldon Art Galleries, 2011
Architecture Discovery Program Exhibit, Sheldon Art Galleries 2009
Perret & Le Corbusier: A Dialogue in Reinforced Concrete Exhibit, Sheldon Art Galleries 2005, Columbia University 2009
Designer Materials Resource Center, WUSTL 2009
Designer 1800 square foot Residence Maysville Colorado, 2005
Kiku Obata & Company, St. Louis, Missouri. Intern Architect. 2000-2002
Powers Bowersox & Associates, St. Louis, Missouri. Intern Architect, 1996-2000

Selected Publications and Recent Research:
Investigations in Scale, Urban Suburban Identity, ACSA Fall North East Conference Proceedings, Hartford CT.
Perret and Le Corbusier: A Dialogue in Reinforced Concrete, Material Matters: Making Architecture, ACSA Fall West Conference Proceedings, Los Angeles, CA
The Materials Resource Center, Sam Fox School of Design & Visual Arts
Initiatives include: evaluation of building material certification and ecolabel criteria and metrics; dataset of building precedents that engage in sustainable design practice; a materials sample display area.
Grant Award: $11,000 – Skandalaris Center for Entrepreneurial Studies, Washington University in St. Louis. 2011.
Grant Award: $40,000 - Academic Venture Fund Grant, Washington University in St. Louis & the Brookings Institution, 2010. The Materials Resource Center has initiated work between the College of Architecture, the Washington University School of Law, the Brookings Institution and industry recognized experts to evaluate and compare the measurement criteria underlying a dozen building material certifications and ecolabels. The results of these cross disciplinary efforts will be presented in a white paper.
Grant Award: $10,000 – Skandalaris Center for Entrepreneurial Studies, Washington University in St. Louis, 2010.

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

Patty Heyda

Assistant Professor

Courses Taught :
Arch 580: Design Thinking – Graduate Required Course (Fall 09, 10)
Arch 652: Metropolitan Development – Graduate Urban Issues Elective (Spring 11)
Arch 656: Metropolitan Urbanism – Graduate Urban Issues Elective (Fall 10)
Arch 711: Urban Design Studio – Graduate Studio (Fall 09, 10)
Arch 312/412: Undergraduate Core Studio (Spring 11)
Arch 782: Independent Study (Spring 10)
Arch 681: Independent Study (Fall 10)

Educational Credentials:
Harvard University Graduate School of Design, Master of Architecture with Distinction, 2000
Tulane University, MArch/ BArch, 1995

Teaching Experience:
Washington University in St. Louis, 2002-2005; 2007-present
Harvard University, 2005-2006
Northeastern University, 2001
Boston Architectural Center, 1999

Professional Experience:
pH1 (principal) 2005-present
HOK Planning Group, 2003-2004
Chan Krieger Associates, 2000-2002
Architectures Jean Nouvel, 1996-1998
Atelier 8000,1995-1996

Licenses/Registration:
LEED AP

Selected Publications and Recent Research:
Architecture is All Over (Forthcoming 2012, MIT Press/Work Books; E. Choi, M. Trotter, eds.) A Call for Architecture's Emergence
Conditions Journal (Issue 5/6, Fall 2010) Quality Urbanism
Mutations (Actar, 2001, R. Koolhaas, ed)) How to Build a Roman City

Professional Memberships: ULI/Urban Land Institute, ACSA

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

John Hoal

Associate Professor of Architecture and Urban Design

Courses Taught:
Arch 657: Contemporary Practices of Sustainable Urbanism - Graduate Urban Issues Elective (Spring
Arch 454: Public Space and City Life - Graduate Urban Issues Elective (Spring 11)
Arch 564J: Sustainable Cities: Infrastructure, Landscapes & Buildings - Graduate Urban Issues Elective (Fall 10)
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio
Arch 655A: Graduate Urban Elective Independent Study: Los Laureless Canyon, Tijuana

Educational Credentials:
Washington University in St. Louis, Doctor of Philosophy in Philosophy, 2002
Washington University in St. Louis, Master of Arts, 1993
Washington University in St. Louis, Master of Architecture and Urban Design, 1989
University of South Africa, Bachelor of Commerce, 1987
University of Natal, South Africa, Bachelor of Architecture, 1981

Teaching Experience:
Washington University in St. Louis, 1997-present, Associate Professor of Architecture & Urban Design
Washington University in St. Louis, 1991-1997, Visiting Assistant Professor of Architecture & Urban Design, 1991-1997

Professional Experience:
H3 STUDIO, INC., St. Louis, Missouri and Durban, South Africa, Founding Partner, 1999 – present
CITY OF ST. LOUIS, MISSOURI, Director of Urban Design, 1993 – 2000, & Assistant Director of Urban Design, 1990 - 1993
URBAN RESEARCH & DESIGN CENTER, Washington University, Research Faculty, 1989 – 1992
DURBAN CITY COUNCIL, SOUTH AFRICA, DEPARTMENT OF ARCHITECTURE, Architect & Project Manager, 1981 - 1987

Licenses/Registration:
South African Institute of Architects and South African Council of Architects
American Institute of Certified Planners (AICP)

Selected Publications and Recent Research:
HUD / DOT Sustainable Livable Communities Grant, 2010 - present
I-CARES Research Grant: Sustainable Urbanism Research & Design Center, 2009 - present
Research Project: Fluvial Urbanism: The Art & Practice of Water Urbanism (book in process), 2007 – 2009: Healthy, Active & Vibrant Living Community Toolkit

Professional Memberships:
The Institute of Urban Design (Fellow September 2001); International Association for Public Participation (Public Participation Specialist); National Charrette Institute (Charrette Manager and Facilitator; The Natural Step (TNS Sustainability Planning Process); Form-Based Sustainability Codes (Form-Based Code Institute & APA)

Selected Awards and Honors:
ASLA Merit Award, “Taylor Park Playground”, St. Louis Chapter, 2011
APA Outstanding Project Award, “Fluvial Cartographies, Tijuana”, Missouri Chapter, 2010
AIA Honor Award, “Fluvial Cartographies at the Border SD_TJ”, St. Louis Chapter, 2010
ULI Smart Growth Awards, “Laureless Canyon Revitalization Project”, California Chapter, 2009

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

Derek Hoeferlin

Assistant Professor

Courses Taught:
Arch 580: Design Thinking – Graduate Required Course (Fall 10, Spring 11)
Arch 419: Architectural Design III - Graduate Core Design Studio (Fall 09)
Arch 511-611-713: Architectural Design V, VII, Metropolitan Design Elements – Graduate Option Urban Design Studio (Spring 10)
Arch 411: Architectural Design III – Undergraduate Option Studio (Fall 10)
Arch 511-611: Architectural Design V, VI, Architectural Design – Graduate Option Studio (Spring 11)

Educational Credentials:
Yale University, Master of Architecture, Post-Professional degree, 2005
Tulane University, Master of Architecture, 2004
Tulane University, Bachelor of Architecture, 1997
Institute for Advanced Architectural Studies, 1997

Teaching Experience:
Washington University in St. Louis, Assistant Professor, 2011-present
Washington University in St. Louis, Senior Lecturer, 2008-2011
Washington University in St. Louis, Lecturer, 2006-2008
Washington University in St. Louis, Affiliate Assistant Professor, 2005
Yale University, Teaching Fellow, 2004
Tulane University, Teaching Assistant, 1995-1997

Professional Experience:
Derek James Hoeferlin *Architect,* 2008-present
H3 Studio, Inc. , 2006-present
Waggonner & Ball Architects, APC, 1997-2003 (full-time), 2003-present (collaborator)
Tulane Regional Urban Design Center (TRUDC), 1997
Nolan Pape Studio, 1993-1997

Licenses/Registration:
Architect #A-2009005514, State of Missouri (2009)
Architect #6776, State of Louisiana (2008)
National Council of Architectural Registration Boards (NCARB) Certificate #65416 (2008)

Selected Publications and Recent Research:
"Gutter to Gulf Goes Global" (2010-2011 Sam Fox School Creative Activity Research Grant) to conduct comparative watershed and delta research, focused on the Mekong
"NL – StL – NO: a Dialogue about Water's Implications for Design and Infrastructure" – panel discussion at Washington University Graduate School of Architecture & Urban Design featuring Renée Jones-Bos, the Ambassador of the Netherlands to the United States
"New Orleans Needs a Water Plan" – op-ed in St. Louis Post Dispatch, August 30, 2009
"The Extraordinary vs. The Everyday Catastrophe" – a conversation with Jessica Garz, edited by Aaron Plewke; Archinect, September 2010 (re-published on Architects for Peace)
"From the Gutter to the Gulf: Legible Water Infrastructure for New Orleans" – with Jane Wolff and Elise Shelley; in RE building – 2010 American Collegiate Schools of Architecture (ACSA) Annual Meeting Proceedings, 2010

Professional Memberships:
National Council of Architectural Registration Boards (NCARB)

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

Eric R. Hoffman, AIA LEED® AP

Visiting Assistant Professor

Courses Taught:
Arch 346: Building Systems I – Graduate Required Elective (Spring 10, 11)
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Spring 10, Summer 10, Fall 10)
Arch 616: Architectural Design VII, Degree Project – Graduate Option Studio (Spring 11)
Arch 630: SLAM CO one – Graduate Technology Elective (Fall 10)
Arch 404: Portfolio Workshop – Graduate Technology Elective (Fall 10)

Educational Credentials:
Washington University in St. Louis, Master of Architecture with Honors, Post-Professional, Givens Scholar, 2005
Oklahoma State University, Bachelor of Architecture, Cum Laude, 1999
Ecoles des Architecture, Versailles, France, 1997

Teaching Experience:
Washington University in Saint Louis, Visiting Assistant Professor, 2008-present
Washington University in Saint Louis, Lecturer, 2006-2008
Washington University in Saint Louis, Instructor & Studio Critic, 2004-2006

Professional Experience:
Hellmuth, Obata + Kassabaum (HOK), St. Louis, MO, Associate & Senior Architect Designer, 2005-present
Hammel, Green and Abrahamson, Inc. (HGA), Mnpls, MN, 2000-2004

Licenses/Registration:
State of Missouri

Selected Publications and Recent Research:
REALIZING (current research endeavor for publication)
SYNTHESIS + EXTENSION regional sources of influence and the work of Kyriakos Krokos (independent study with Zeuler Lima, Ph. D, Spring 2005)

Professional Memberships:
American Institute of Architects (AIA)
National Council of Architectural Registration Boards (NCARB)
Green Building Certification Institute LEED Accredited Professional

Philip Holden

Senior Lecturer

Courses Taught:
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Fall 10)
Arch 616: Architectural Design VII, Degree Project – Graduate Option Studio (Fall 09, Spring 10, 11)
Arch 580: Design Thinking – Graduate Required Course (Fall 09, Spring 10)

Educational Credentials:
Washington University, Master of Architecture, 1993
University of Kansas, Bachelor of Architecture, With Highest Distinction,1979
University of Kansas, Bachelor of Environmental Design, With Highest Distinction, 1979
Heriot-Watt University, Edinburgh, Scotland, College of Art, School of Architecture, 1975
University of Missouri, School of Engineering, 1972

Teaching Experience:
Washington University in St. Louis, School of Architecture, 2000-present, Senior Lecturer
Washington University in St. Louis, Professor in Practice, Affiliate Associate Professor, 1996-1998
Washington University in St. Louis, Visiting Associate Professor, 1993

Professional Experience:
Holden Architects, St. Louis, Architect, 1982- present
Harry Weese & Associates, Chicago, Architect, 1981-1982
Stanley Tigerman & Associates, Chicago, Architect, 1979-1981
Ittner & Bowersox Architects, St. Louis, Intern Architect, 1977-1978
Butler Building, Kansas City, Structural Designer, 1976-1977

Licenses/Registration:
Architect: Illinois, Missouri

Selected Publications and Recent Research:
Holden Architects Offices, AIA St. Louis Design Award
Rehoboth Baptist Church and Gymnasium
Kirksville, Missouri: New Church, Classrooms, Offices, and Gymnasium. 15,000 sf.
St. Alban Roe Parish Life Center, AIA St. Louis Design Award
Wildwood, MO: Social Center for a parish in West County including classrooms and meeting rooms of different sizes up to seating for one thousand, administrative and library. 48,000 sf.
Mary, Mother of the Church Center, AIA St. Louis Design Award
St. Louis County, MO: New courtyard, church expansion and parish center/gymnasium. 12,000 sf.
St. Francis of Assisi Church, AIA St. Louis Design Award
St. Louis, MO: Complete renovation and expansion of a traditional Franciscan church. 10,500 sf.
St. Elizabeth Ann Seton Church
St. Charles, MO: New church seating 800, parish hall, and eight classroom school addition. 43,500 sf.
Virtual Realty Offices, AIA St. Louis Design Award
St. Gerard Majella Parish Center, St. Louis Masonry Triennial First Award
Kirkwood, MO: New parish center consisting of a gymnasium, meeting rooms, and new classrooms. 24,000 sf.

Professional Memberships:
American Institute of Architects, National Council of Architectural Registration Boards

Brok Howard

Lecturer

Courses Taught :
Arch 408D: BIM 101 Workshop - (Fall 09, 10, Spring 10, 11)
Arch 436A: Information Modeling & Technology – Graduate Technology Elective (Spring 11)

Educational Credentials:
Washington University in St Louis, Master of Architecture, 2006

Teaching Experience:
Washington University in St Louis, 2008-present, Lecturer

Professional Experience:
HOK, St Louis, 2010-present
Arcturis, St Louis, 2007-2010

Licenses/Registration:
Revit Architecture Certified Professional
CSI Certified Construction Document Technologies
USGBC LEED Green Associate

Selected Publications and Recent Research:
None

Professional Memberships:
American Institute of Architecture, Associate Member
Construction Specification Institute, Member and Professional Director
CSI Emerging Professional National Task Team
Building Enclosure Council, St Louis Chapter Board Member
Young Architects Forum in St Louis Chair
AIA Design Awards Committee
National Institute of Building Science
BuildingSMART Alliance
National BIM Standards Project Committee

Dorothée Imbert **Professor**

Courses Taught
Arch 570: Landscape Architecture: History & Theory I (1850-1970) – Graduate Landscape Elective (Fall 10)
Arch 502L: Landscape Architecture Design Studio II – Graduate Landscape Studio (Spring 11)

Educational Credentials:
K.U. Leuven, PhD program in Architecture, Urbanism and Planning (ASRO), 2010
University of California, Master of Architecture, 1989
University of California, Master of Landscape Architecture, 1989
Unité Pédagogique d'Architecture nº 1, Architecte D.P.L.G., 1984

Teaching Experience:
Washington University in St. Louis, 2010-present, Chair, Master of Landscape Architecture Program
Professor, College and Graduate School of Architecture & Urban Design
Harvard University GSD, 2003-10, Associate Professor of Landscape Architecture,
Harvard University GSD, 2004-05, Director of the Master in Landscape Architecture Degree Programs
Harvard University GSD, 1999-03, Assistant Professor of Landscape Architecture,
University of California, Berkeley, 1996, Studio Instructor

Selected Professional Experience:
Advisory Committee for the planning of Novartis North American Headquarters, 2010-present
Design advisory team "Allston Farms," Harvard University Allston Extension, 2007
Constructing the Swiss Landscape, Harvard University Graduate School of Design, 2006
Sheik Saud Al-Thani Greenhouse, Doha, Qatar. Invited competition, 2003
Malpensa Business Park, Italy (Arata Isozaki, Richard Rogers, Archa, Arup), 2000
Landscape consultant to Arup Associates, London and Milan, 2000
Commercial Development, Santhià, Italy, Landscape schematic design, 2000
Peter Walker and Partners, Berkeley, California,1996-99
Projects: Max Mara Headquarters, Mancasale (RE), Italy. Project designer and liaison (1997-98) ; The American Center for Wine, Food, and the Arts, Napa. Project designer (1998-99); Barnsdall Park, Los Angeles. Project designer (1998-99) ,

Selected Honors and Awards:
ASLA Communication Award for *Garrett Eckbo: Modern Landscapes for Living,* 1997
AIA Book Award for *The Modernist Garden in France,* 1994
George Wittenborn Memorial Award for *The Modernist Garden in France,* 1994

Selected Publications and Recent Research:
"Aux Fermes Citoyens!" In Ecological Urbanism. Mohsen Mostafavi, Gareth Doherty, editors. Cambridge, MA; Baden, CH: Graduate School of Design; Lars Müller, 2010.
Between Garden and City: Jean Canneel-Claes and Landscape Modernism, University of Pittsburgh Press , 2009.
Garrett Eckbo: Modern Landscapes for Living (co-author), University of California Press, 1996
The Modernist Garden in France, Yale University Press, 1993.

Christof Jantzen

I-CARES Professor of Practice

Courses Taught:
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Spring 10, 11)
Arch 411: Architectural Design III – Undergraduate Option Studio (Fall 10)

Educational Credentials:
Southern California Institute of Architecture, Master of Architecture, 1994
Technical University Darmstadt, Diplom Ingenieur, 1988-1991
University of Kaiserslautern, Bachelor Degree, 1985-1988
Westfaelische Wilhelms University of Muenster, Germany, Studies at History, Philosophy, Archeology, 1983-1984

Teaching Experience:
Washington University in St Louis, 2009-present, I-CARES Professor of Architecture
AIA National Convention Workshop, Boston, 2008, Public Presentation and Workshop
Washington University in St. Louis, 2007, Interdisciplinary Student Workshop
Boston Society of Architects, 2007 Jury Member, Selection Committee Member
Illinois Institute of Technology, Host of a series, "House of the Future" Project, 2006
Auburn University, Rural Studio , Advisory Committee Member
University of Southern California, 1999-2000, Undergraduate Studio and Seminars
California State Polytechnic University, 1999, Undergraduate Studios
University of Stuttgart, 1994-1995, Assistant Professor,
Southern California Institute of Architecture, 1994, Instructor

Professional Experience:
Behnisch Studio East, Boston, Partner, 2007-present
Behnisch, Behnisch & Partner, Los Angeles, Principal Partner, 1999-present
Behnisch & Partner, Stuttgart, 1995-1999
Frank O. Gehry & Associates, Santa Monica, 1994
Richard Meier & Associates, Los Angeles, 1993
Lengfeld & Wilisch Architects, Darmstadt, Germany

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Genzyme Center in Cambridge, Massachusetts. director of the Genzyme project, which achieved LEED Platinum certification. It is an early precedent in sustainability and has been honored with many awards including the AIA/COTE Top Ten Green Awards, the Northeast Sustainable Energy Association Award and the Environmental Protection Agency's Wasterwise Program Champion Award

Professional Memberships:
AIA, LEED AP

George W. Johannes, AIA

Senior Lecturer

Courses Taught:
Arch 646: Professional Practice I – Graduate Required Seminar (Fall 09, 10, Spring 10, 11)
Arch 647A: Advanced Professional Practice – Graduate General Elective (Fall 09, 10, Spring 10, 11)
Arch 648F: Project Design Realization: From Concept to Construction – Graduate General Elective (Spring 10, 11)

Educational Credentials:
Washington University in St. Louis, Master of Architecture, 1973
Washington University in St. Louis, Bachelor of Arts in Architecture, 1970

Teaching Experience:
Washington University in St. Louis, 1994-present, Senior Lecturer

Professional Experience:
George W. Johannes, AIA Architect, 2006-present, Owner/Principal
Johannes/Cohen Collaborative, Inc., 1992-2006, Partner/President/Architect
Johannes+Associates/Architects, 1990-1994, Owner/Principal
The Christner Partnership, Inc., 1980-1990, Managing Partner/Architect
1976-1980, TCP Associate/Architect
Chiodini & Associates, 1975-1976, Project Manager &Architectural Designer
Anselevicius & Rupe, 1974-1975, Architectural Designer
Hoffman/Saur Associates, 1973-1974, Architectural Designer

Licenses/Registration:
Licensed Architect, Missouri 1978

Selected Publications & Awards:
#9 Hortense Place Kitchen Remodeling, At Home Magazine, Nov-Dec, Second Place, 2009
Lake Living, August, 2009
Inside Columbia, May, 2009
Sinquefield Lake House, At Home Magazine, Nov-Dec, First Place (on cover), 2008
Independence Center, Landmarks Achievement Award, 2007
WireWorks Loft Complex / Sqwires Market & Café , Landmarks Achievement Award, 2002
Trinity Lutheran Church Parish House, Landmarks Achievement Award, 2001
Old Chain of Rocks Bridge Renovation and Master Plan, Landmarks Achievement Award, 2000
University Lofts, Landmarks Achievement Award, 2000

Professional Memberships:
American Institute of Architects

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

Sung Ho Kim

Associate Professor

Courses Taught:
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Spring 10)
Arch 616: Architectural Design VII, Degree Project – Graduate Option Studio (Spring 11)
Arch 317: Architectural Design I – Graduate Core Studio(Fall 09, 10)
Arch 436: Mapping Soft Bodies/Constructing Complex Objects – Graduate General Elective (Fall 09, 1
Arch 580: Design Thinking – Graduate Required Course (Spring 10, 11)

Educational Credentials:
Massachusetts Institute of Technology, SMArchS, 1996-1998
Architectural Association, AA Diploma,1994-1996
Rhode Island School of Design, Bachelor of Architecture, Bachelor of Fine Arts, 1989-1994

Teaching Experience:
Washington University in St. Louis, 2009 – present, Associate Professor
Washington University in St. Louis, 2002-2009, Assistant Professor,
Washington University in St. Louis, 2001, Visiting Assistant Professor
Northeastern University, 2010-2002, Assistant Professor
Rhode Island School of Design, 1998-2001, Adjunct Faculty

Professional Experience:
Axi:Ome llc, Partner, 2004-current
Interrogative Design Group at MIT, Principal Researcher, 1997-2001
Wellington Reiter Urban Instruments, Project Designer, 1996-1997
Nasrine Seraji Architects, Project Designer, 1995

Licenses/Registration:
RIBA Parts I and II, 1999

Selected Publications and Recent Research:
Design Architects: Communications Tower, North Carolina, 2010-current
Design Architects: St. Louis Public Radio Station, University of MO St. Louis, 2007-current
Exhibition design, Specular: Performance, Bruno David Gallery, 2009
Design Architects: KETC public television station, Nine Network, 2009
Author, Specular: Between Practice and Speculation, Damdi Architectural Press, 2009
Author, Spatial Practice, ORO Editions, 2009
Design Architects: Digital Fabrication Lab, WUSTL, 2008

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

Donald N. Koster

Senior Lecturer

Courses Taught:
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Spring 10, 11)
Arch 112: Introduction to Design Processes II – Undergraduate Core Design Studio (Spring 10, 11)
Arch 419: Architectural Design III - Graduate Core Design Studio (Fall 09, 10)
Arch 323A: Architectural Representation I – Graduate Required Course (Fall 09, 10)

Educational Credentials:
Washington University in St. Louis, Master of Architecture with Honors, 2003
Washington University in St. Louis, Bachelor of Arts, Major in Architecture, Cum Laude, 1995

Teaching Experience:
Washington University in St. Louis, College and Graduate School of Architecture & Urban Design, 2009-Current, Senior Lecturer
Washington University in St. Louis, College and Graduate School of Architecture & Urban Design, 2008-2009, Visiting Assistant Professor
Washington University in St. Louis, College and Graduate School of Architecture & Urban Design, 2006-2008, Visiting Assistant Professor / Weese Teaching Fellow
Washington University in St. Louis, College and Graduate School of Architecture & Urban Design, 2003- 2006, Lecturer

Professional Experience:
Donald Nelson Koster Architect, Principal, St. Louis, 2005-present
Rugo/Raff Ltd. Architects, Designer / Project Manager, Chicago, 1997-2000
Rugo/Raff Ltd. Architects, Intern, Chicago, 1996 – 1997

Licenses/Registration:
Registered Architect: Illinois, USVI
NCARB Certificate No. 68815
LEED AP

Selected Publications and Recent Research:
Successful grant recipient for Community-Based Design efforts related to sustainable affordable homes and urban food access.

Professional Memberships:
American Institute of Architects, 2006-present
US Green Building Council (USGBC), 2008-present

Andreas Kultermann

Instructor

Courses Taught:
Arch 425D: Meso-American Architecture – Graduate History Theory Elective (Spring 10, 11)

Educational Credentials:
Washington University in St. Louis, Master of Architecture, 1987
Washington University in St. Louis, Bachelor of Arts, Art History and Fine Arts, 1978

Teaching Experience:
Washington University in St. Louis, 2010-2011, Instructor
Southeastern Community College, Burlington, Iowa, 1998-2000, CAD Instructor
Illinois Central College, 1991-1994, Architecture Instructor
Berlitz Schools of Languages, St. Louis, Missouri, 1979-1981, English Instructor

Professional Experience:
Independent practice, St. Louis, MO, 2000-present
Numerous architectural offices in St. Louis, New York and Iowa, 1987-present

Licenses/Registration:
State of Missouri (1991)
State of Illinois (1997)
State of Iowa (1997)

Selected Publications and Recent Research:
Coursework, lectures and research on Native American architecture.
Research and travel for the history of Native Peruvian architecture.
Research and travel for the phenomenology and topology of Plazas.
Research, analysis and design of tension membrane fabric structures.

Professional Memberships:
N/A

Stephen Leet

Professor

Courses Taught:
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Spring 11)
Arch 419: Architectural Design III - Graduate Core Design Studio (Fall 09, 10)
Arch 616: Architectural Design VII, Degree Project – Graduate Option Studio (Spring 10)
Arch 464A: Architecture and Photography – Graduate History Theory Elective (Spring 11)
Arch 565C: Architecture, Photography, and Film - Graduate History Theory Elective (Fall 09, 10, 11, Spring 10)
Arch 210: Introduction to Architectural Design - Undergraduate Florence Studio (Summer 10)

Educational Credentials:
University of Kentucky, College of Architecture, B. Arch, 1977

Teaching Experience:
Washington University in St. Louis, College and Graduate School of Architecture and Urban Design, 2009 – present, Professor
Washington University in St. Louis, 1996 – 2009, Associate Professor
Washington University in St. Louis, 1993–95, Visiting Assistant Professor
Washington University in St. Louis, 1990-93,Affiliate Assistant Professor
New York Institute of Technology, 1988-90, Visiting Professor
New York Institute of Technology, 1987-88, Adjunct Associate Professor

Professional Experience:
8K A+D, St. Louis (with Susan Bower, Architect), 2002 – 09
Bower – Leet Architects, New York City, Partner, 1985-90
Anschuetz, Christidis & Lauster, Architects, New York City, 1983-85
Alfredo De Vido Associates, Architects, New York City, 1983
I.M. Pei & Partners, New York City, 1979-82
Peter Hoppner, Architect, New York City, 1978

Licenses/Registration:
New York State, n. 17646, 1985

Selected Publications and Recent Research:
Richard Neutra's Miller House (New York: Princeton Architectural Press, 2004)
Le forme della ragione: Marco Albini, Franca Helg, Antonio Piva (Venice: Marsilio, 1995)
Franco Albini, Architecture and Design 1934-1977 (New York: Princeton Architectural Press, 1990)
"House and Garden with Two Courtyards" in Paul Amatuzzo, Practice, 2010
"Design as Export: The Case of Italy" Harvard Design Magazine, Summer 1998
"Charles and Ray Eames" American National Biography ANB, Oxford University Press and American Council of Learned Societies, 1998
"Economia nel recupero" and "Lontano dalla qualità," Costruire, 1997
"Dal mercato al municipio" and "Scacco alle reti, La Jolla - Istituto di Scienze Neurologiche," Costruire, 1996
"Presentació," Massip-Bosch, E.; Leet, S; Quetglas, J. in Alfons Soldevila, Experimental Dwellings 1971-1994 (Barcelona: Edicions UPC 1994).

Professional Memberships:
N/A

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

Zeuler R. M. A. Lima, Ph.D., CREA-BR — Associate Professor

Courses Taught:
Arch 455A: Urban Books: Imag(en)ing Saint Louis – Graduate Urban Issues Elective (Fall 10, 11)
Arch 527N: Design at an Impasse: The Experience of Lina Bo Bardi – Graduate History Theory Elective (Spring 10, Fall 11)
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Fall 10)
Upper-level undergraduate design studios (Spring 10,11)

Educational Credentials:
Columbia University, Heyman Center of the Humanities, 2001-2, Post-doctoral Mellon Fellow,
University of São Paulo, 2001, Ph.D. in Architecture and Urbanism
University of São Paulo, 1994, Master's of Science in Architecture and Urbanism
University of São Paulo, 1986, Professional Degree in Architecture and Urbanism

Teaching Experience:
Washington University in Saint Louis, School of Architecture, 1999-2001 and 2001 to present
Columbia University, Heyman Center of the Humanities, 2001-2
University of Michigan, School of Architecture and Urban Planning 1997-99
University of São Paulo, School of Architecture and Urbanism,1988-1996

Professional Experience:
Projeto Paulista de Arquitetura S/C Ltda., São Paulo, Brazil, Principal in partnership, 1989-96
Self-employed architect and landscape architect in São Paulo, Brazil, 1987-88
Benedito Abbud Paisagismo Ltda., São Paulo, Brazil, Landscape Architect, 1986-87

Licenses/Registration:
Architect and urbanist, CREA-SP-Brazil (Brazilian Architecture Council)

Selected Publications and Recent Research:
Zeuler R. Lima, Lina Bo Bardi: Modernism from the Inside Out, New Heaven: Yale U. Press, (2013)
Zeuler R. Lima, Verso un'architettura semplice, Rome: Bruno Zevi Foundation, 2007
Zeuler R. Lima, Architecture in Latin America (1960 to Today), in Elie Haddad, David Rifkin (ed.) London: Ashgate, (2013)
Zeuler R. Lima, Lina Bo Bardi: A Life Between South and North, Madrid:Art&Co, 2008, 58-61, 130-1.

Professional Memberships:
Society of Architectural Historians
Latin American Studies Association
Advisory Board for "Modern Architecture in Latin American" exhibition, MoMA, NY, 2013
Advisory Board for "Art, Architecture, and Culture in Brazil" exhibition, Newark Museum, NJ, 2015

Bruce Lindsey

Dean and E. Desmond Lee Professor for Community Collaboration

Courses Taught:
Arch 111A: Introduction to Architecture I – Undergraduate Course (Fall 09, 10)
Arch 111: Introduction to Design Processes I - Undergraduate Design Studio (Fall 09)
Arch 376: Design Thinking for Science, Engineering, Business, & The Liberal Arts - Undergraduate Elective (Fall 11)
Arch 564A: Urban Development Seminar - Graduate Urban Issues Elective (Fall 10)

Educational Credentials:
Yale University, Master of Architecture, 1986
University of Utah, Master of Fine Arts, 1979
University of Utah, Bachelor of Fine Arts, 1976

Teaching Experience:
Washington University in St. Louis, College and Graduate School of Architecture & Urban Design, 2006-present, Professor
Auburn University, 2006, Paul Rudolph Professor
Auburn University, 2001-06, Professor & Head, School of Architecture
Auburn University, 2002-06, Co-Director Rural Studio
Auburn University, 2001-03, Program Chair, Master of Landscape Architecture
Carnegie Mellon University, 1994-01, Associate Head
Carnegie Mellon University, 1994-01, Associate Professor of Art and Architecture
Carnegie Mellon University, 1987-94, Assistant Professor
Arizona State University, 1998-99, Visiting Professor, Foundation Coordinator
SUNY Buffalo,1998, Pierce Visiting Critic
Catholic University of America, 1993-94, Visiting Critic summer program
Virginia Polytechnic Institute, 1986-87, Assistant Professor

Professional Experience:
Bruce Lindsey Architecture, Principal, 1974-present
Architecture Works, Project Architect, 2004-2005
Bruce Lindsey Paul Rosenblatt Associates, 1989-1994
Felix Drury Architects, Project Designer, 1984
Prescott Muir Architects, Project Designer, 1982-1983

Licenses/Registration:
Licensed architect, Pennsylvania

Selected Publications and Recent Research:
Specular, Between Practice & Education, Heather Woofter, editor, essay: "Architecture Machine," Damdi Press, 2009
cityworksLosAngeles: Handbook, edited by Elizabeth Martin, essay: "Emergent Collective Practice," Forum Press, 2005
Phi Kappa Phi Forum, magazine 2003, "Sambo Mockbee and the Rural Studio"
Digital Gehry, Bruce Lindsey, series edited by Anonino Saggio, a book on the design process and use of digital tools in the office of Frank O. Gehry, Birkhauser, 2001, translations in Italian, & Chinese

Professional Memberships:
American Institute of Architects
American Society of Landscape Architects
United States Green Building Council

Jenny Lovell

Assistant Professor

Courses Taught:
Arch 439: Environmental Systems II – Graduate Required Course (Spring 11)
Arch 419: Architectural Design III - Graduate Core Design Studio (Fall 09, 10)
Arch 616: Architectural Design VII, Degree Project – Graduate Option Studio (Spring 10, 11)
Arch 537D: Depth of Surface: Building Envelope More than Skin Deep – Graduate Technology Elective (Spring 09, 10)
Arch 580: Design Thinking – Graduate Required Course (Fall 09, 10)

Educational Credentials:
Royal Institute of British Architects (R.I.B.A) Part III, with distinction, 1995
University College, The Bartlett School of Architecture, London, UK, Diploma in Architecture, 1993
University of Manchester, School of Architecture, UK, Bachelor of Arts with Honors in Architecture, 19

Teaching Experience:
Washington University, School of Architecture, Assistant Professor, 2008 – 2011
University of Virginia, College of Architecture, Assistant Professor, 2004 – 2008
University of Virginia, School of Architecture, Visiting Assistant Professor, 1999 – 2000
University of Michigan, College of Architecture, Visiting Adjunct Assistant Professor, 1995 – 1997

Professional Experience:
William McDonough & Partners, Charlottesville, USA, Consulting Architect, 2007-2008
Allies & Morrison Architects, London, UK, Senior Design and Project Architect, 2000-2004
Allford Hall Monaghan Morris Architects, London, UK, Project Architect, 1995-2000*
Arup Associates, London, UK, Assistant Architect, 1993-1995
J&L Gibbons Environmental Architects, London, UK, Assistant Architect, 1990
Matthew Priestman Architects, Assistant Architect, 1989

Licenses/Registration:
Architects Registration Board United Kingdom (A.R.B.U.K)

Selected Publications and Recent Research:
Lovell, Jenny. "Building Envelopes: An Integrated Approach." Building Enclosure Sustainability Symposium (BESS) Proceedings. Pomona, CA: California State Polytechnic University, 2010.
Lovell, Jenny. (2009). Building Envelopes: An Integrated Approach. New York, NY: Princeton Architectural Press.
Lovell, Jenny. "Four Years In | Four Years Out, Two University Buildings 2004-2008." PLEA 2009 - 26th Conference on Passive and Low Energy Architecture Proceedings. Québec City, Québec: Passive and Low Energy Architecture (PLEA), 2009.
Lovell, Jenny. (2009). "Shaping the Design of the New Institute of Criminology" In C. Walston (Ed.) Challenging Crime. Cambridge, UK: Third Millennium Publishing Ltd.

Professional Memberships:
Royal Institute of British Architects (R.I.B.A)

Adrian Luchini

Raymond E. Maritz Professor of Architecture

Courses Taught:
Arch 511-611: Architectural Design IV, V, VI - Graduate Option Studio (Fall 09, Spring 10)
Arch 616: Architectural Design VII, Degree Project – Graduate Option Studio (Fall 11)
Arch 580: Design Thinking – Graduate Required Course (Spring 10, 11, Fall 10)

Educational Credentials:
Harvard University, Master of Architecture, 1985
University of Cincinnati, Master of Science ofArchitecture, 1983
Universidad Católica de Córdoba (Arg), Dipl Arch, 1979

Teaching Experience:
Washington University in St. Louis, Tenured Professor, former Co-Director of the Graduate Program, Director of International Programs (1985-present)
Taught in the US, Argentina and Spain

Professional Experience:
Projects in China, Saudi Arabia, South Korea, Argentina, England and the USA in Urban Planning, Architecture (Institutional, Commercial and Residential), 1979 - present

Licenses/Registration:
Registered Architect, Argentina, License #8065
AIA # 30146691

Selected Publications and Recent Research:
Monograph, Adrian Luchini, CWA; Domus , Abitare (Italy); Quaderns (Spain); Progressive Architecture, Architectural Record, Harvard Architecture Review (USA);Summa (Argentina) ElArqua (Uruguay) Space (Korea); GA, Shinjenchiku-Bunka (Japan),El Mercurio (Chile), Elle Décor (USA)

Professional Memberships:
American Institute of Architects, USA
Sociedad Central de Arquitectos, Argentina
Consejo Profesional de Arquitectura e Ingenieria de Cordoba

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

Peter B. MacKeith

Associate Professor

Courses Taught:
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Fall 09 / Spring 10, 11 (Hel))
Arch 339: Concepts and Principles in Architecture – Graduate Required Seminar (Fall 09, 10)
ARCH 410T: Contemporary Nordic Architecture: Critical Studies – Graduate Masterclass (Fall 09)
ARCH 410V: Louis Kahn and Alvar Aalto: Critical Studies – Graduate Elective (Spring 10)

Educational Credentials:
Yale School of Architecture, Master of Architecture, Alpha Rho Chi Medal, AIA Scholarship, 1985
University of Virginia, Bachelor of Arts, with Distinction of Echols Scholar, 1981

Teaching Experience:
Washington University in St. Louis, Associate Dean, Sam Fox School of Design & Visual Arts, 2006-prese
Associate Professor of Architecture, 2006-present
Associate Dean, Assistant Professor, School of Architecture, 1999-2005
Helsinki University of Technology, 1990-92,1995-99, Director of Studies, Master of Architecture – International Program, Lecturer
University of Virginia, 1993-95,1999, Assistant Professor / Visiting Professor
University of Ljubljana (Slovenia), 1998-1999, Visiting Professor
Yale School of Architecture, 1985-1989, Critic in Design / Dean of Trumbull College, Yale College

Professional Experience:
Design Consultant, Behnisch Architekten/Jan Gehl Architects Design Team
"Framing a Modern Masterpiece" International Competition, St. Louis, USA / Finalist, 2010
Design Consultant, Peter Rose/ARO/Michael Van Valkenburgh Design Team
"LOW2NO" INTERNATIONAL COMPETITION, Helsinki, Finland / Finalist, 2009
FIELD OFFICE, St. Louis, Missouri, 2006-present
Juhani Pallasmaa Architects, Helsinki, Finland, 1990-1992
Design Consultant, VMDO Architects, Charlottesville, Virginia, USA (AIA-VA Merit Award), 1989

Selected Publications and Recent Research:
The SOM Journal, Editor, 2010 - 2014
Archipelago: Essays on Architecture, author/editor (Helsinki, 2006: Rakennustieto)
The Dissolving Corporation: Architecture and Corporate Identity in Finland (Helsinki, 2005: EVA)
Encounters: Architectural Essays (by Juhani Pallasmaa), editor (Helsinki, 2005: Rakennustieto)
Investigations in Collective Form, Fumihiko Maki, author / Peter MacKeith, editor (St. Louis, 2004: SoA).
Primary Architectural Image, editor (St. Louis, 2002: School of Architecture, WUSTL)
Alvar Aalto: Between Humanism and Materialism (Peter Reed, editor) (New York, 1998: MoMA)
Estonian Architecture: The Story of a Nation (editor), (Helsinki, 1994: Rakennustieto)
THE FINLAND PAVILIONS: Finland at the Universal Expositions 1900 – 1992 (Helsinki, 1993: City Ltd.)
PERSPECTA 24: The Yale Architectural Journal (New York, 1988: Rizzoli International Publications).
Articles on contemporary Finnish and Nordic architecture and design: 1991-ongoing

Selected Awards and Honors

ACSA Service Award - ACSA/NCAA Administrators Conference	2009
ACSA NATIONAL AWARD FOR CREATIVE ACHIEVEMENT IN DESIGN EDUCATION	2008
Graham Foundation for the Visual Arts Grants	1996, 2001, 2008
Washington University I-CARES Grant	2007-2008
National Science Foundation, School of Engineering development grant	2007
FINALIST, RIBA Bookshops International Book of the Year (*for Encounters*)	2005
Finnish Cultural Foundation Grants	1991, 1996
Fulbright Fellowship (Finland)	1990

Igor Marjanovic

Associate Professor

Courses Taught:
Arch111: Introduction to Design Processes I – Freshman Design Studio(Fall 09, 10)
Arch318: Architectural Design II – Graduate Core Design Studio (Spring 10, 11)
Arch528: Architectural Association 1971-1990– Graduate History Theory Elective (Spring 10, 11)
Arch421: Marina City: Bertrand Goldberg & the Aura of Chicago Modernism – Graduate History Theory Elective (Fall 09)

Educational Credentials:
University of Illinois at Chicago, Master of Architecture, 2000
University of Belgrade, Serbia, Bachelor of Architecture (Dipl. Ing. Arh), 1998

Teaching Experience:
Washington University in St Louis, College and Graduate School of Architecture, 2006-present
Iowa State University, Department of Architecture and Department of Art and Design, 2003-06
University of Illinois at Chicago, School of Architecture, 2000-2003

Professional Experience:
ReadyMade Studio, St Louis, MO and Bowling Green, OH 2002-present
OWP/P Architects, Chicago, IL, 2000-2002
Osnova Projekt, Belgrade, Serbia, 1996-1999
Denise Pontes Arquitetura e Interiores, Fortaleza, Brazil, 1995-1996

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Igor Marjanovic and Katerina Rüedi Ray, Marina City: Bertrand Goldberg's Urban Vision (New York: Princeton Architectural Press, 2010)
Igor Marjanovic and Clare Robinson, eds., Intersections: Design Education and Other Fields of Inquiry, Conference Proceedings (Ames: Iowa State University, 2006)
Igor Marjanovic, Katerina Rüedi Ray, and Jane Tankard, Practical Experience: An Architecture Student's Handbook for Year Out/Internship, (Oxford: Architectural Press, 2004)
Igor Marjanovic, Katerina Rüedi Ray, and Lesley Lokko, The Portfolio: An Architecture Student's Handbook, (Oxford: Architectural Press, 2003; Chinese edition in 2010)
Igor Marjanovic and Lindsey Stouffer, "Blighted," in Architecture and Field/Work, S. Ewing, J. Michael McGowan, C. Speed, and V. Clare Bernie, eds., (London: Routledge, 2010)
Igor Marjanovic, "Beauty and the Beast," in Specular: Between Practice and Education – Axi:Ome USA, Design Document 32, Heather Woofter, ed., (Seoul: DAMDI Publishing, 2009)
Igor Marjanovic, "Alvin Boyarsky's Delicatessen," in Critical Architecture, Jane Rendell, Jonathan Hill, Murray Fraser, and Mark Dorrian, eds., (London: Routledge, 2007)
Igor Marjanovic, "Wish You Were Here: Alvin Boyarsky's Chicago Postcards" in Chicago Architecture, C. Waldheim and K. Rüedi Ray, eds. (Chicago: Univ. of Chicago Press, 2005)
Igor Marjanovic, "Lines and Words on Display: Alvin Boyarsky as a Collector, Curator and Publisher," Architectural Research Quarterly, Fall 2010 (Cambridge University Press)
Igor Marjanovic, "Alvin Boyarsky's Chicago: An Architectural Critic in the City of Strangers," AA Files no. 60, Spring 2010, (London: Architectural Association)

Professional Memberships:
Architectural Association, London, UK
North American Society for Serbian Studies, Washington, DC
Society of Architectural Historians, Chicago, IL

Robert McCarter

Ruth and Norman Moore Professor of Architecture

Courses Taught (AY 2009-10, 2010-11):
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Fall 09, 10, Spring 10, 11)
Arch 527 Graduate History/Theory Seminar, "Contemporary Critical Regional Practices"
A46 ARCH 527 Graduate History/Theory Seminar, "Contemporary Critical Global Practices"
A46 ARCH 575 Graduate History/Theory Seminar, "Painting Into Architecture"

Educational Credentials:
Columbia University, Master of Architecture, 1985
North Carolina State University, Bachelor of Environmental Design in Architecture, 1977

Teaching Experience:
Berlage Institute, Rotterdam, The Netherlands, 2011, Master Class with Wiel Arets
Washington University, 2007- present, Professor
University of Louisville, 2007, Frederick L. Morgan Distinguished Professor of Architecture
University of Florida, 1991-2007, Professor and Director
Columbia University, 1986-1991, Associate Professor,
North Carolina State University, 1986, Visiting Professor,

Professional Experience:
Robert McCarter Architect, St. Louis, Missouri, Principal, 2007- present
D-Mc^2 Architecture, PA, Gainesville, Florida, President, 1991-2007
Robert McCarter Architect, New York, New York, Principal, 1981-1991
Hellmuth Obata and Kassabaum, San Francisco, California, Project Designer, 1977-1981

Licenses/Registration:
Architect since 1981; NCARB Certificate.
Current Registration: Missouri; Previous Registration: Massachusetts, New York, Florida.

Selected Publications and Current Research:
Frank Lloyd Wright: Critical Lives (Reaktion Books, 2006; four languages); sole author.
On and By Frank Lloyd Wright (Phaidon Press, 2006); editor and co-author.
Louis I. Kahn (Phaidon Press, 2005; three languages); sole author.
William Morgan Architects (Images Press, 2002); sole author.
Frank Lloyd Wright (Phaidon Press, 1997; three languages); sole author.
Unity Temple: Frank Lloyd Wright (Phaidon Press, 1997; two languages); sole author.
Fallingwater: Frank Lloyd Wright (Phaidon Press, 1994; three languages); sole author.
Alvar Aalto (Phaidon); Carlo Scarpa (Phaidon); Architecture as Experience (Phaidon), with Juhani Pallasmaa; Wiel Arets at Work: A Wonderful World (Birkhauser); Atlas of 20th Century Architecture (Phaidon), with Adrian Forty and Jean-Louis Cohen.

Selected Professional Memberships:
Board of Directors, Florida AIA (1991-2001); International Editorial Board, Alvar Aalto Academy; Society of Architectural Historians; Advisory Board, Sarasota Architectural Foundation.

Selected Awards and Honors:
Named a "Top Ten Educator" in US architecture schools; *Architect* magazine, 2010; Rotch Traveling Studio Award, 2003; Graham Foundation Grant, 1989; SOM Traveling Fellowship, 1982.

Pablo I. Moyano Fernández

Lecturer

Courses Taught:
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Spring 11)
Arch 419: Architectural Design III - Graduate Core Design Studio (Fall 09, 10)
Arch 580: Design Thinking – Graduate Required Course (Spring 11)

Educational Credentials:
Washington University in St. Louis, Master of Architecture, with honors, 2004
Washington University in St. Louis, Master of Urban Design with honors, 2004
University of Buenos Aires, Diploma in Architecture, 2000

Teaching Experience:
Washington University in S. Louis, 2005 – Present, Lecturer of Architecture
University of Buenos Aires 1998 - 1999

Professional Experience:
lauLAB, *Principal,* St. Louis, MO, 2005 - present
Forum Studio, Inc., Associate, Project Designer, St. Louis, MO, 2005 – 2011
Luchini AD, St. Louis, MO, Team Architect, 2003 – 2006
Hellmut, Obata & Kasabaum (HOK), St. Louis, MO, Intern Architect, 2003 - 2003
Secretary of Culture of the City of Buenos Aires, Dep. of Infrastructure, Buenos Aires, Argentina, Project Designer & Project Manager, 2001 - 2002
Baez, C arena, G rementieri A rchitects (Architectural F irm), B uenos A ires, A rgentina, Associate Architect, 2001 - 2002
Phonex-Isocor SA (Construction Company), Buenos Aires, Argentina, Project Assistant, 1999 - 2001
D & M C onstrucciones S A (Architectural F irm & Construction C ompany),Buenos A ires, A rgentina, *Associate Architect*, 1995 - 1999
OOPS! (*Documentation, Rendering and Plotting Service),* Buenos A ires, A rgentina, *Personal Enterprise Associate,* 02/1997 - 08/2000
.

Licenses/Registration:
Licensed Architect, Buenos Aires, Argentina
LEED Accredited Professional
Sociedad Central de Arquitectos, Buenos Aires, Argentina

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Eric Mumford

Professor

Courses Taught:
Arch 3284/4284: Architectural History II: Since 1880 – Graduate Required Elective (Fall 10, 11)
Arch 4782: Modern Architecture in St Louis S 10
Arch 522C: Collective Form and the Vernacular (with Dean Emeritus Constantine Michaelides) F 09

Educational Credentials:
Princeton University, School of Architecture, PhD, 1996
Massachusetts Institute of Technology, Master of Architecture, 1983
Harvard University, A.B., 1980

Teaching Experience:
Washington University in St. Louis, Professor, 2009-present
Harvard University, Dept of History of Art & Architecture, 2004, Visiting Associate Professor
Washington University in St. Louis, 2001-08, Associate Professor
Washington University in St. Louis, 1996-2001, Assistant Professor
Washington University in St. Louis, 1994-96, Visiting Asst. Professor
Harvard University GSD, 1995-96, Lecturer in Urban Design

Professional Experience:
Worked as an architect for SOM-Chicago (1981) the Ehrenkrantz Group, New York (1983-85) and other firms to 1989.

Licenses/Registration:
Licensed architect (NY State, 1986; inactive)

Selected Publications and Recent Research:
Defining urban design: CIAM Architects and the formation of a discipline, 1937-69 (New Haven and London: Yale University Press, 2009)
Co-editor, with Hashim Sarkis, Josep Lluís Sert: the architect of urban design (New Haven and London: Yale University Press, 2008)
Editor and contributor, Modern Architecture in St. Louis, 1948-1973: Washington University and postwar American architecture (Washington University School of Architecture/University of Chicago Press, 2004).
The CIAM Discourse on Urbanism, 1928-1960 (MIT Press, 2000).

Professional Memberships:
Society of Architectural Historians; Landmarks Association of St Louis

Brian Newman

Adjunct Lecturer

Courses Taught :
Arch 408C: Advanced Digital Rendering Workshop – Graduate Required Elective (2008-2010)
Graphic Representation (2009-2011)

Educational Credentials:
Washington University in St. Louis, Master of Architecture, 2006
Indiana University, Bachelor of Architecture, 1999

Teaching Experience:
Washington University in St. Louis, 2008-present, Adjunct Lecturer
Chicago Children's Museum, 2008, Visiting Artist

Professional Experience:
Bond Wolfe Architects, 2010-2011, Architectural Designer
Trivers Associates, 2008-2009, Architectural Designer
Cannon Design, 2007-2008, Architectural Designer
Gero House (church complex renovation)
Levey House (house renovation)
Office Building (schematic design)

Licenses/Registration:
N/A

Selected Publications and Recent Research:
St. Louis Magazine's Look/Listen Arts Journal (Architecture Critic / 2010-present)
The Architect's Newspaper (Architectural reporting and editorial / 2009-present)
Art/Urban/Phenomenology, Architecture and Phenomenology Conference (2007)

Professional Memberships:
NCARB
Associate/American Institute of Architects

Winifred Elysse Newman

Visiting Assistant Professor

Courses Taught :
Arch 3283-4283: Architecture History I: Antiquity to Baroque – Graduate History Theory Elective (Spring 11)
Arch 333: Case Studies in 20th Century Architecture – Graduate History Theory Elective (Fall 09, 10)
Arch 484D: Space, Society, & the Digital – Graduate History Theory Elective (Spring 11)
Arch 563G: Mapping: Applied Theory – Graduate Urban Issues Elective
Arch 339: Concepts and Principles in 20th Century Architecture – Graduate Required Course

Educational Credentials:
Harvard University, Ph.D of Architecture
Harvard University, Master of Philosophy
Harvard University, Master of Architecture
University of Texas at Austin, BS
University of Texas at Austin, Bachelor of Architecture
University of Texas at Austin, BFA, Candidate

Teaching Experience:
Washington University in St. Louis, Visiting Assistant Professor, History/Theory, Design, & Urban Theory, Art History
Harvard University GSD, Assistant Professor, History/Theory
Teaching Fellow, History/Theory, Art History and Urban Design courses
University of Tennessee
Visiting Assistant Professor, Design and Technology

Professional Experience:
Architect of Record LLC, St. Louis, Partner
Field Office LLP, St. Louis, Partner
Hellmuth, Obata and Kassabaum, Washington DC, St. Louis, Senior Designer
DeStefano + Partners, Chicago, Designer
Environments Group, Chicago, Designer
Charles Moore, Austin, Intern

Selected Publications and Recent Research:
Dissertation Title: ”Imaginative Beholding: Physiological Psychology and the Discourse on Representation in Fin-de-Si`ecle Germany” (committee: Antoine Picon, Peter Galison, Alina Payne, K. Michael Hays)
”Traces (Inscriptions) and Movement,” [Trans. in German as ”Spuren und Bewegung (Inskription),” Traces and Movement, 2009
”Between Movement: The Photographic Work of Aurore Reinicke” [Trans. in German as ”Zwischen Bewegung und Bewegung: Die Photografischen Arbeiten von Aurore Reinicke,”Reminiscence 2009
(Co-Editor with Adam Drisin), Journal of Architectural Education Vol. 61-3 Theme Issue: War and Architecture, Vol. 61, Dec 2007
”City that Care Forgot” in New Orleans: Strategies for a City in Soft Land, Joan Busquets, Joan and Felipe Correa eds., Cambridge. MA, 2005

Professional Memberships:
AIAS, Society of Architectural Historians, Van Alan Institute, History of Science Society, Cognitive Neuroscience Society

Hannah Rae Roth

Lecturer

Courses Taught :
Arch 434M: Materials Research Seminar – Graduate Technology Elective (Fall 09, 10)
Arch 434N: Materials Research Seminar – Graduate Technology Elective (Spring 10)

Educational Credentials:
Washington University in St. Louis, Master of Architecture, Alpha Rho Chi Medal for Leadership, Service and Merit, 1974
Washington University in St. Louis, Bachelor of Arts, 1970

Teaching Experience:
Washington University in St. Louis, 2009-present, Lecturer

Professional Experience:
McCarthy Construction, Vice President – Marketing, St. Louis, MO, 1976-1992

Selected Publications and Recent Research:
Grant Award: $11,000 - Skandalaris Center for Entrepreneurial Studies, Washington University in St. Louis, 2011
Grant Award: $40,000 - Academic Venture Fund Grant, Washington University in St. Louis & the Brookings Institution, 2010. The Materials Resource Center has initiated work between the College of Architecture, the Washington University School of Law, the Brookings Institution and industry recognized experts to evaluate and compare the measurement criteria underlying a dozen building material certifications and ecolabels. The results of these cross disciplinary efforts will be presented in a white paper.
Grant Award: $10,000 – Skandalaris Center for Entrepreneurial Studies, Washington University in St. Louis, 2010

Professional Memberships:
USGBC Missouri Chapter, Technical Committee

Justin Scherma

Lecturer

Courses Taught :
Arch 551: Principles of Ecology – Graduate Landscape Elective (Spring 11)
Arch 658: Surveying the Regional – Graduate Urban Issues Elective (Spring 11)

Educational Credentials:
Harvard University, Master of Landscape Architecture, 2010
Sarah Lawrence College, Bachelor of Arts, 2001

Teaching Experience:
Washington University in St. Louis, 2011-present, Lecturer,
Harvard University, 2008-2010, Graduate Teaching and Research Assistant

Professional Experience:
Washington University in St. Louis, 2010, Program Assistant, Landscape Architecture
Penny White travel grant for research in Sweden, 2009
Dumbarton Oaks, Washington DC, Intern, 2009
Designer, “LightCycle “, winning competition entry for public art in Somerville, MA, 2006-2007
Mt. Auburn Cemetery, Cambridge, MA, Volunteer, 2006-2007

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

James J. Scott

Lecturer

Courses Taught:
Arch 646: Professional Practice I – Graduate Required Seminar (Fall 09, 10, Spring 10, 11)

Educational Credentials:
Saint Louis University, School of Law, Juris Doctorate, 1976
University of Missouri, A.B., Cum Laude, 1973

Teaching Experience:
Washington University in St. Louis, School of Architecture, 1984 – present

Professional Experience:
Greensfelder, Hemker & Gale, P.C., Officer, Construction Law Practice Group, 2008 - present
Fru-Con Construction Corporation, Senior Vice President and General Counsel, 2005 - 2008
Jacobs Engineering Group Inc., Senior Counsel, 1999 – 2005
Sverdrup Corporation, Vice President/General Counsel, 1984 – 1999

Licenses/Registration:
Missouri Bar, 1976 - present

Selected Publications and Recent Research:
"Integrated Project Delivery", AIA, AGC and DBIA, 2009.
"Collaboration, Conflict Management and Compliance", Construction Industry Institute, 2009.
"Risk Assessment, Managing Contracts, and Key Provisions", American Bar Association Forum on the Construction Industry, 2009.
"Contracts, Risk and Construction Pricing", American Society of Professional Estimators, 2010.
"Construction Lawyering in the Age of the Unthinkable", American College of Construction Lawyers, 2010
"The Future of Construction Law Development", American College of Construction Lawyers, 2011.

Professional Memberships:
Fellow, American College of Construction Lawyers
Member and former Chair, ABA Forum on the Construction Industry,
Member, National Roster of Construction Neutrals, American Arbitration Association
Member, Missouri Bar
Advisory Board Member, Woman Owned Contractor, Regional Union Construction Center

R. Phillip Shinn

Senior Lecturer

Courses Taught:
Arch 447: Structures I – Graduate Required Seminar (Fall 09, 10)
Arch 448: Structures II – Graduate Required Seminar (Spring 10, 11)

Educational Credentials:
Missouri University of Science and Technology, Cert. of Contemporary Structural Engineering, 2007
Washington University, B.T. in Architecture, 1979
Princeton University, Bachelor of Science in Civil Engineering, 1972

Teaching Experience:
Washington University in St. Louis, 1987-present, Senior Lecturer

Professional Experience:
Jacobs Engineering, Director, Structural Engineering, 2000-present
EQE, Technical Manager, 1995-2000
Theiss Engineers, Vice President, 1979-1995

Licenses/Registration:
PE, MO

Selected Built Designs:
Washington University in St. Louis Kemper Museum and Walker Hall
Washington University in St. Louis Steinberg Renovation
Washington University in St. Louis South 40 Wohl Garage
Washington University in St. Louis Computer Center Renovation
Washington University in St. Louis Mudd and Park Halls
University of Missouri S&T, Rolla, Engineering Management Building
University of Missouri S&T, Rolla, Civil Engineering Butler Carlton Building
St. Peters, MO RecPlex
BJC Hospital St. Louis, Yalem Addition
BJC Hospital St. Louis, Ambulatory Care & Pedestrian Bridge
BJC Children's Hospital Addition, St. Louis, MO
Boone County, MO Elementary School
Clayton School District MO, Additions and Restorations
Cole County, MO R-1 High School
East and West Jefferson City, MO Middle Schools
Forsyth School Addition, Clayton, MO
Alberici Office Building Addition, St. Louis, MO
Ameren UE Corporate Headquarters, St. Louis, MO – Seismic retrofit
Apex Oil (Jefferson Smurfit) Building, Clayton, MO
Forsyth Centre Garage and 7 Level Addition, Clayton, MO
St. Louis County Shaw Park Drive Garage, Clayton, MO
Incline Village, NV Recreation Center
Meramec State Park, MO Visitors Center
Michigan Army National Guard AASF, Grand Ledge, MI. (Cable-Stayed Roof)
Duke University East & West Recreation Centers
Quincy University Student Health and Fitness Center
St. Louis University Pius XII Library Addition
St. Louis Arena Demolition (implosion)
McNichols Center Demolition, Denver, CO
Mile High Stadium Demolition, Denver, CO

Kenneth Tracy

Visiting Assistant Professor

Courses:
Arch 419: Architectural Design III – Graduate Core Design Studio (Fall 09)
Arch 580: Design Thinking – Graduate Required Seminar (Fall 10)
Arch 481: Independent Study (Fall 10)
Arch 326G: Digital Fabrications – Graduate Digital Elective (Spring 11)
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Spring 10, 11, Summer 10, Fall 10)

Education:
Columbia University, GSAPP, Masters in Architecture, 2002-2005
University of Florida, School of Architecture, Bachelor of Design, Magna Cum Laude, 1996-2000

Teaching Experience:
Washington University in St. Louis, 2009-present, Visiting Assistant Professor
Columbia University, GSAPP, 2009, Lecturer
The Pratt Institute, GAUD, 2006-2008, Adjunct Assistant Professor
Columbia University, GSAPP, 2006-2008 Adjunct Assistant Professor
University of Pennsylvania, School of Design, 2006, Lecturer
New Jersey Institute of Technology, School of Architecture, 2005-2006, Instructor

Professional Experience:
4-pli Design, Brooklyn, NY, Founding Partner, 2005-Current
Taras Residence, Manhattan, NY, Summer 2009
Thirst Wine Merchants, Brooklyn, NY, Fall 2006
Associated Fabrication LLC, Brooklyn, NY, Founding Partner, 2005-Current
Whistler 2010 Bus Shelters, Whistler, BC, Current
Halo Bar, Washington, DC, Summer 2008
Cirrus Sculpture, Zaha Hadid Architects, Cincinnati, OH, Summer 2008

Selected Publications:
Design of the Times, Ami Kealoha, The New York Post, May 12 2007
Associated Fabrication: Heavy Metal/Light Touch, David Sokol, Arch. Record, October 2007
Subcompact Hybrids, Lisa Delgado, Architects Newspaper, October 2007
the taste files: San Francisco, New York and Los Angeles, Yosh Asato and Mimi Zeiger
Form Magazine, December 2007
Transmaterial 2, Blaine Brownell, Dimple Halftone by Ken Tracy of AF, featured January 3, 2008

College of Architecture
Graduate School of Architecture & Urban Design
Sam Fox School of Design & Visual Arts
Washington University in St. Louis

Heather Woofter

Associate Professor

Courses Taught:
Arch 318: Architectural Design II – Graduate Core Design Studio (Spring 10, 11)
Arch 616: Architectural Design VII, Degree Project – Graduate Option Studio (Fall 10)
Arch 511-611: Architectural Design IV, V, VI – Graduate Option Studio (Fall 09)
Arch 484C: Metabolic City : Drawing and Urbanism – Graduate History Theory Seminar (Fall 10, 11)
Arch 402A: Measured Representation - Graduate General Elective Seminar (Fall 09, 10, 11)

Educational Credentials:
Harvard University GSD, Master of Architecture, 1996-1998
Virginia Tech, Bachelor of Architecture, 1986-1991

Teaching Experience:
Washington University in St. Louis, 2010-present, Associate Professor
Washington University in St. Louis, 2005-2010, Assistant Professor
Washington University in St. Louis, 2004-2005, Visiting Assistant Professor
Virginia Technical University, 2001-2005, Assistant Professor
Roger Williams University, 1999-2001, Adjunct Faculty
Boston Architectural Center, 1998, Adjunct Faculty
Aristotle University of Thessaloniki, Greece, 2010, Visiting Faculty

Professional Experience:
Axi:Ome llc, Partner, 2004-present
Robert Luchetti Associates, Project Architect, 1999-2001
Marks Barfield, Project Architect and Project Manager, 1998-1999
Bohlin Cywinski Jackson, Project Architect and Project Manager, 1993-1996

Licenses/Registration:
Registered Architect, PA (1997) and MO (2010)
RIBA Parts I and II, 1999

Selected Publications and Recent Research:
Design Architects: Communications Tower, North Carolina, 2010-current
Design Architects: St. Louis Public Radio Station, University of MO St. Louis, 2007-current
Curator and exhibition design, Metabolic City, Kemper Art Museum international loan exhibition, 2009
Exhibition design, Specular: Performance, Bruno David Gallery, 2009
Design Architects: KETC public television station, Nine Network, 2009
Author, Specular: Between Practice and Speculation*, Damdi Architectural Press, 2009*
Editor, Spatial Practice*, ORO Editions, 2009*
Design Architects: Digital Fabrication Lab, WUSTL, 2008
Essay on Axi:Ome Amonte House, "Un-Modern" Architecture Boston, by Luis Carranza, 2008
Damdi publications, Axi:Ome on Colour*,* Axi:Ome on Performance*,* Axi:Ome on Portfolio*, 2010*

Natalie Yates

Assistant Professor

Courses Taught:
Arch 462: Landscape Materials – Graduate Landscape Elective (Spring 11)
Arch 480A: Case, Trace, Displace: Dialogue Between River and City (Spring 11)
Arch 501L: Landscape Architecture Design Studio III
Arch 521L: Digital Landscape Representation II

Educational Credentials:
Louisiana State University, Master of Landscape Architecture, 2009
Cornell College, Bachelor of Arts, 1997

Teaching Experience:
Washington University in St. Louis, 2010 – present, Assistant Professor
Louisiana State University, 2009, Adjunct Lecturer
Louisiana State University, 2007 – 2009, Research/Teaching Assistant

Professional Experience:
Louisiana State University, Researcher Fellow, Coastal Sustainability Studio, 2010
River Road Design Consortium, Baton Rouge, Louisiana, Project Designer, 2009 - 2010
Visual Logic, Inc., New Orleans, Louisiana, Graphics and Modeling, 2008 - present
Mossop + Michaels, New Orleans, Louisiana, Design Intern, Summer 2008

Licenses/Registration:
N/A

Selected Publications and Recent Research:
"Abstraction Language, Digital/Analog Dialogues," Cantrell and Yates, ACADIA, Chicago, IL, October 2009 (conference proceedings)
"Environment Modeling, Illustration, and Animation." Cantrell and Yates, Hoboken, NJ: Wiley & Sons, forthcoming 2012.

Professional Memberships:
ASLA, Associate Member
Association of Women Faculty, Washington University in St. Louis

Christine Yogiaman

Assistant Professor

Courses Taught:
Arch 323A: Architectural Representation I – Graduate Required Course (Fall 09, 10)
Arch 323B: Architectural Representation II – Graduate Required Course (Spring 10, 11)
Arch 317: Architectural Design I – Graduate Core Studio (Fall 09, 10)
Arch 318: Architectural Design II – Graduate Core Design Studio (Spring 10, 11)

Educational Credentials:
Columbia University GSAPP, Master in Architecture, 2007
University of Michigan, Bachelor of Science in Architecture, 2002

Teaching Experience:
Washington University in St Louis, 2010-Present, Assistant Professor
Washington University in St Louis, 2009-2010, Visiting Assistant Professor
City College of New York, School of Architecture, 2008, Studio Teaching Assistant

Professional Experience:
4-pli/ Associated Fabrication, New York, Product, System Research and Development, 2009-2009
Dean Wolf Architect, New York, Project Manager, 2007-2009
Derek Wee Architecture, San Francisco, Intern Designer, 2002-2004

Licenses/Registration:
N/A

Selected Publications and Recent Research:
OVERLAP – Extending the edges and boundaries in art and architecture, Curator, Elga Wimmer Gallery, Chelsea, New York, 2009
Design Grant GSAPP 126th Anniversary Celebration, Lowe Library, Columbia University, New York, 2007
Contributions to "Constructive Practices, Between Economy and Desire" Kathryn Dean, 2008

Professional Memberships:
N/A

Tomislav Žigo

Lecturer

Courses Taught :
Information Modeling for Sustainable Design (Spring 10, 11)
Performative Skins (Fall 09, 10)

Educational Credentials:
University of Rijeka, Croatia, Master of Science, Mechanical Engineering, 1992
Washington University School of Architecture, Master of Architecture, 1999

Teaching Experience:
Washington University, Sam Fox School of Design & Visual Arts, Lecturer, 2008–present
Washington University, School of Architecture, Instructor, 2003–2006

Professional Experience:
Professional with 16 years of architectural experience.
Clayco Inc., Director of Virtual Design and Construction, 2008–present
ARBA Studios, Principal and founder of design / consulting firm, 2004-present
Independent BIM implementation and consulting, 2004-2008
Christner Inc., Project architect / BIM manager, 2000-2004
Washington University, Researcher, Urban Research and Design Center, 1996-1999
Paradigm Architects, Associate, 1996-1999

Licenses/Registration:
Assoc AIA, LEED AP

Selected Publications and Recent Research:
ARBA Studios – Autodesk success story
Independence Center – Modeling vs Reality, Greening the Heartland
Virtual Reality environments and Building Performance Modeling

Professional Memberships:
AIA, USGBC, AGC

IV.4.6 Visiting Team Report from Last Visit

Washington University in St. Louis

SAM FOX SCHOOL OF DESIGN & VISUAL ARTS

College of Architecture
Graduate School of Architecture & Urban Design

Office of the Dean

September 14, 2006

Ms. Sharon Matthews, AIA
Director
The National Architectural Accreditation Board
1735 New York Avenue, NW
Washington, DC 20006-5292

Dear Ms Matthews:

Per your recommendation I write on behalf of the Graduate School of Architecture & Urban Design at Washington University in St. Louis to ask that this letter be put into our file stating our request to alter the language in the final VTR from our accreditation visit during spring 2006.

NAAB Visiting Team Report, Spring, 2006

The Visiting Team commentary for section 1.1 contains inaccurate or incorrect terminology and language, in relation to the University's inauguration of the Sam Fox School of Design & Visual Arts, an administrative unit including the College of Architecture (undergraduate), the College of Art (undergraduate), the Graduate School of Architecture & Urban Design, the Graduate School of Art, and the Kemper Museum of Art. This administrative unit is not a "center", is not a "college" and decidedly not a "merger"; these important characterizations were confirmed several times throughout the visit in discussion with the Visiting Team, by Chancellor Wrighton, by Dean Sincoff and by Associate Dean MacKeith.

We believe that the Visiting Team commentary for section 1.1 is most accurately stated as follows:

The program (of the Graduate School of Architecture & Urban Design) has a supportive relationship with the larger University community and the University's Chancellor. The inauguration of the Sam Fox School of Design & Visual Arts will provide a new frame for the programs in architecture and art: each program will be able to retain their necessary autonomies, but there are also many potential opportunities for interaction and interchange. While there are still some unknowns, faculty, staff and students are excited about the prospects of the Sam Fox School of Design & Visual Arts. The new School will further combine digital media, fabrication workshops and staff resources to provide a strong environment for collaboration. Additionally, the connection of the programs in architecture to the new Kemper Museum will provide a venue for public exhibition of student, faculty and alumni work.

We appreciate your consideration and thank you for including this information in our file.

Sincerely,

Jerome J. Sincoff, FAIA
Dean

Washington University in St. Louis, Campus Box 1079, One Brookings Drive, St. Louis, Missouri 63130-4899
(314) 935-6200, *Fax:* (314) 935-7656, www.arch.wustl.edu

National Architectural Accrediting Board, Inc.

July 21, 2006

Dr. Mark S. Wrighton, Chancellor
Washington University in St. Louis
One Brookings Drive
Campus Box 1192
St. Louis, Missouri 63130

NAAB

Dear Chancellor Wrighton:

At the July 2006 meeting of the National Architectural Accrediting Board (NAAB), the board reviewed the *Visiting Team Report* for the Washington University in St. Louis School of Architecture. As a result, the professional architecture program:

Master of Architecture

was formally granted a six-year term of accreditation. The accreditation term is effective January 1, 2006. The program is scheduled for its next accreditation visit in 2012.

Accreditation is subject to the submission of *Annual Reports*. *Annual Reports* are due by June 1 and **must** include a response to each condition identified as not met in the *Visiting Team Report*, a response to each of the causes of concern in the *Visiting Team Report*, a brief summary of changes that have been made or may be made in the accredited program, and the two-page statistical report. If an acceptable *Annual Report* is not submitted to the NAAB by the time of its fall board meeting, the NAAB may consider advancing the schedule for the program's next accreditation sequence. A complete description of the *Annual Report* process can be found on pages 14–15 of the *NAAB Procedures for Accreditation, 2006 Edition*.

NAAB encourages public dissemination of information about each school contained in both the school's *Architecture Program Report* and the *Visiting Team Report*. If the Visiting Team Report is made public, then it is to be published in its entirety.

The visiting team has asked me to express its appreciation for your gracious hospitality.

Very truly yours,

C. Wm. Bevins FAIA

C. William Bevins, FAIA
President

Enc. Visiting Team Report

cc: Jerome J. Sincoff, FAIA, Dean
Peter Steffian, FAIA, Team Chair
Visiting Team Members

1735 New York Avenue, NW
Washington, DC 20006
www.naab.org
tel 202.783.2007
fax 202.783.2822
email info@naab.org

Washington University in St. Louis
School of Architecture

Visiting Team Report

Master of Architecture

(M. Arch. 3: undergraduate degree in or outside architecture
plus 105 graduate credit hours)
(M. Arch. 2+: undergraduate degree including architecture studies
plus 75 graduate credit hours)
(M. Arch. 2: undergraduate degree in architecture
plus 60 graduate credit hours)

The National Architectural Accrediting Board
1 March 2006

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

The visiting team thanks Dean Jerry Sincoff and Associate Dean Peter MacKeith for their support during our visit and the faculty, students, and staff for their willingness to be open and forthright in their discussion with us. We found the entire school community respectful and supportive of one another and enthusiastic about their roles in what they believe to be an excellent program.

Our thanks also go to the faculty members and staff responsible for organizing and displaying the student work in the team room. It was clearly organized, allowing our team members to find course materials quickly, which was conducive to an efficient process.

2. Progress Since the Previous Site Visit

Condition 7, Physical Resources

Previous Team Report: *At the time of the visit this condition was not yet resolved. The team believes, however, that the School and University have a plan that can and will be implemented and completed within the next five years. If for some unforeseen reason they are not in place by then, we believe that a full accreditation could be in serious jeopardy.*

Since the last visit, Givens Hall has been completely renovated providing upgraded, more flexible space for the Architecture Program. This, along with up to 10,000 square feet (3,048m^2) of new space dedicated to architecture to be provided next door in Steinberg Hall and a new Art and Architecture Library to be provided in the adjacent Kemper Art Museum, made the team believe that the quality and amount of space provided for architecture would be sufficient for some time to come.

3. Conditions Well Met

1.2 Architecture Education and Students
2 Program Self-Assessment Procedures
13.3 Graphic Skills
13.4 Research Skills
13.6 Fundamental Skills
13.8 Western Traditions
13.15 Sustainable Design
13.18 Structural Systems
13.19 Environmental Systems
13.20 Life-Safety
13.21 Building Envelope Systems
13.24 Building Materials and Assemblies
13.26 Technical Documents
13.28 Comprehensive Design

4. Conditions Not Met

3 Public Information
13.25 Construction Cost Control

5. Causes of Concern

The team is still concerned about the well-being of the tenure-track faculty. It found the same concern that the previous visiting team observed:

> A somewhat veiled issue that is affecting the spirit, productivity, professional, and personal well-being among the tenure-track faculty. While they fully recognize the value of change within the curriculum and actively support the school's direction in many ways, there is a perception of political pressures coming from the tenured faculty that may have a very negative impact on their ability to progress within the program as teachers, scholars, and creative individuals. There appears to be little collective interest in the constructive role of mentorship by some of the tenured faculty, and the atmosphere has become highly politicized. In combination with the issues identified as concerns under Condition II.6, Human Resources, and II.7, Human Resource Development, these are serious issues that deserve attention, careful consideration,"investment," and constructive measures by the faculty and school administration.

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 NAAB 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 program has a supportive relationship with the larger university community and the university's chancellor. The combining of the art and architecture program into the Sam Fox Visual Arts and Design Center provides many potential opportunities for interaction and interchange. While there are still some unknowns, faculty, staff, and students are excited about the prospects of this merger. The new school will combine digital media, the shop, and staff resources to provide a strong environment for collaboration. In addition, the connection of the school to the new museum will provide a venue for public exhibition of student, faculty, and alumni/ae work.

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]	[ ]

When asked what they liked most about teaching here, the faculty responded "the students." The graduate student population is articulate, engaged, and highly motivated. The strength of studio culture was readily visible during the team's visit, both in the enthusiasm with which the graduate students engaged one another as well as their continual presence in the school itself.

The evidence of the program's encouragement and support of student leadership is evidenced by the inclusion of a range of students as active members in virtually all school committees, including the curriculum committee, faculty and dean search committees, and the lecture series committee. The students take great initiative in managing their education and are encouraged to bring concerns regarding course offerings or any perceived lack thereof, resources, and needs to the attention of the administration. Each semester begins with a week-long orientation and social event that provides students with the opportunity to become acquainted with one another and with the culture of the school. Student activities are also encouraged and there seems to be strong involvement among graduate students in the Graduate Architecture Council (GAC), which promotes not only social activities, but also those related to communication, professional liaisons, and campus life. An example of the leadership exhibited by the GAC is "Green Givens," a student-led initiative that promotes the application of sustainable issues within the school.

Information is readily available and communicated to students through a variety of venues including department, school, and university-wide list serves, bulletins, committees, and organizations as well as individual "mail bins" set up in a central location for all students. Faculty and administration also provide support through an "open-door policy" that welcomes students to voice their concerns and punctuates the program's fostering of inquisitiveness and initiative in seeking opportunities for individual growth and development.

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 (IDP) 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 school's comprehensive programs in design, history, technology, graphics, urban and landscape studies, and professional practice prepare students to meet the requirements for licensure and practice. These are reinforced by the fact that many full-time faculty and all most all of the affiliate and visiting faculty are practicing professionals.

The school's director of career services is also the IDP coordinator. She advises students on the career-building process and brings practitioners on campus to inform students about the IDP program and the Missouri state registration requirements.

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 learn 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]	[ ]

Strong links exist between the School of Architecture and the professional community. Most of the full-time faculty maintains architectural practices. Many of the part-time faculty and visiting lecturers practice architecture, engineering, and/or related professions and relate their practical experiences to the students. An example is Arch 646, Professional Practice.

The current dean brings more than 40 years of practice experience to his present position. The firm he served recently as CEO offers numerous opportunities for students to accomplish research and directly experience architecture practice. The Dean also utilizes the advisory services of two study groups: the Dean's Alumni Advisory Board composed of alumni/ae who practice in the St. Louis area and the National Architecture Council.

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]	[ ]

In the written response to the NAAB Perspectives (in the university's 2005 APR, p. 37), the first condition of accreditation, the school anticipated filling the Ruth and Norman Moore Chair of Architecture with an architect with social and environmental perspectives. An individual with those qualifications has been identified and retained and is currently teaching a 500-/600-level graduate design studio.

His summation of the course intent indicates that the design project site is located in an area of diverse urban occupation by a low-income population of about 150,000 people. Most of this population has little access to basic public services such as leisure, sanitation, public transportation, health and child care, and education. The project is to "envision a contemporary use for the historic site that engages the city and enriches the everyday life of this underprivileged population."

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]	[ ]

The assessment procedures do an excellent job of including solicitation of the faculty's, students', and graduates' views on the program's curriculum and learning. The process and the documentation provided do establish clear goals for the future.

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 NAAB 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* NAAB Conditions for Accreditation.

Met	Not Met
[ ]	[X]

Both the APR and the *School of Architecture Graduate Programs Catalog* of 2005–06 contain an outdated "NAAB Statement."

The "NAAB Statement" published by the School of Architecture does not include the Doctor of Architecture as a recognized accredited degree program.

The balance of the catalog is clear and informative.

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 also have equitable opportunities to participate in program governance.

Met	Not Met
[X]	[ ]

The university is committed to a policy of equal employment opportunity and is committed to affirmative action to increase the numbers and job levels of qualified members of minority groups, women, veterans, and the handicapped.

The School of Architecture is equally committed to these endeavors but is having difficulty meeting its goal of attracting underrepresented and minority faculty. The percentage of women has increased in the past 10 years from 7.68 to 23.5 percent; African-Americans from 0 to 6 percent; and Hispanics from 7.6 to 12 percent. There are currently 10 tenured faculty—one of whom is a woman. Of nine tenure-track faculty, four are women and one is Asian-American.

The 2005 student body comprised 43 percent women, 6.3 percent African-Americans, 7.2 percent Asian, 3.4 percent Hispanics. These percentages were unchanged from 1992, except for an increase in the percentage of women.

The school has a strategy for advancing these interests, but is competing with other institutions for a limited pool of applicants for faculty, student, and staff positions. Immediate strategies include inviting more women and minorities as lecturers and reviewers and utilizing—for outreach—representatives who know the program. Long-term strategies include identifying candidates from historically minority schools.

Within the student body, leadership positions are held by at least as many women as men (there may be a higher percentage of women), but minorities are underrepresented. Students candidly discussed a social separation between Caucasian and minority students, but there was no clear reason for these other than personal preference. All groups interact within the studio and classroom situation.

Female faculty expressed a concern about opportunities for women once they join the faculty. There was a general sense of marginalization, even thouth they participate in committees and are involved in governance.

5. Studio Culture

The school is expected to demonstrate a positive and respectful learning 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 demonstrates a positive and respectful learning 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.

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	Not Met
[X]	[ ]

This team has the same concern as the previous visiting team, which stated,

> Many of the tenure-track faculty have been appointed to committees and position of administrative significance within the School. While this in many ways is a positive indication of their talents and willingness to participate beyond their primary roles as teachers, there is a widespread concern among the tenure-track faculty about the impact that this has on their productivity. There appears to be an unusual reliance on nontenured faculty for several highly intensive "service" activities (in some cases serving in program chair positions and on an inordinate number of committees) and it is difficult to see how this meshes with high expectations that the university places on reappointment, tenure, and promotion.

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	Not Met
[X]	[ ]

The program has a healthy budget for supporting collective opportunities for faculty and student growth within and outside the program. However, there is concern about the limited amount of funds that is provided annually for faculty for professional development (see Condition 10, Financial Resources). The tenure/promotion review document has not been updated since 1973. This document should be updated to more clearly define the expectations for teaching, scholarship, and service at the university.

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	Not Met
[X]	[ ]

Since the last visit, Givens Hall has been renovated, construction is nearing completion on more than 110,000 square feet (33,528m^2) in two new buildings, and adjacent space in Steinberg Hall will be renovated within the next several years.

The Givens renovation included extensive code and mechanical upgrades, with central air conditioning, new thermal windows, elevator access to all floors, and a new fire stair. Space is provided for all design studios, lecture and seminar access, and shared offices for faculty, as well as related instruction and administrative support spaces. The building is now up to code, as well as being ADA compliant.

The new construction, when completed later in 2006, will provide space for the architecture history library, computer lab (currently housed in a trailer), digital fabrication lab and snack bar, freeing space in both Givens and Steinberg to expand studio and/or review space.

When the Steinberg Hall renovation is completed, expected in 2007, additional space for the School of Architecture will be available for secure display/review space and educational spaces. Faculty offices are large and easily accommodate two or three individual work spaces. Potential privacy concerns are largely ameliorated by assigning offices to combinations of full- and part-time faculty and by staggering posted office hours to avoid conflict. The space added in Steinberg will include additional conference rooms.

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]	[ ]

There are two types of information resources available to the School of Architecture: the Art & Architecture Library and the Visual Resources Center (Slide Library). The A&A Library is a branch of the university's Library System; the Visual Resources Center is part of the Art History program of the College of Arts and Sciences. Both reside in Steinberg Hall.

The architecture volumes at the library are fewer, but comparable to these in other universities' libraries. The library holds 25,807 items in architecture related subjects, plus videos and DVDs. There are 201 architecture journals listed in the catalog. Funding is provided by the university, with selection decisions made by the librarian and a faculty committee. The collection is comprehensive and is augmented every year. It is also augmented through interlibrary loan programs.

The university has purchased a Luna digital imaging management system through which students and faculty have access to digital images. It also subscribes to ARTstor—collections of architecture and design images from 11 similar collections. The library is open 80.5 hours per week and has a professional reference librarian with a background in Art History. The library has five full-time staff positions.

When the Sam Fox School building is completed, the library is slated to move to new quarters. The APR states this will provide an additional 3,700 ft^2 (1,128m^2) of space. The APR also states that the Visual Resources Center is scheduled to move into the new building and increase in size. The collection currently contains 245,000 slides (transparencies) and continually adds digital images.

Both facilities have sufficient collections that are kept current. Staff is appropriately trained and available for students and faculty for individual assistance in faculty orientation, library skills, and research methods.

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]	[ ]

A strong working relationship exists between the development office and the program. The alumni/ae and development plans for the department are well conceived and align very well with the goals of the program. The budget model for the program is very clear; however, the team has the following concerns. The first concern is that the university's undergraduate tuition allocation needs to reflect more closely the actual use-based count of students taking courses in other undergraduate colleges. It increases a burden on tuition income and takes away from possible financial aid all to the detriment of the students. The second concern is that the amount of money provided for annual faculty professional development is limited: $1,000 for tenured faculty, $1,500 for tenure-track faculty, and a larger amount provided for program chairs.

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]	[ ]

The current administrative structure of the program does 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. However, there is some uncertainty on the part of faculty, staff, and students regarding how this new administrative structure will be configured and function within the new college.

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]	[ ]

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]	[ ]

Many classes require essays. Examples of this include Arch 4283/4284, Architecture History I & II; Arch 580, Design Thinking; and Arch 339, Concepts and Principles. History classes include in-depth essay questions on exams. Design Thinking requires articulation by the students on their project.

Spoken presentation skills are required in classes in which either individual presentations or team presentations are required. Examples include Arch 339, Concepts and Principles, and Arch 4284, Architectural History II. Spoken skills are a requirement of all design studios for the jury/review process. In some design studios, the students are required to hand drawings in 2 nights before the review to ensure that they are well rested and can articulate their ideas during presentation.

The students whom the team met during the visit were articulate and open and capable of expressing themselves clearly, listening to others, and quickly synthesizing information.

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]	[ ]

Graduate students demonstrated excellent thinking and communication skills, both in interaction with the team verbally as well as in their written projects and coursework. They are bright, inquisitive, open to diverse ideas, and generally capable of reaching well-reasoned conclusions after suitable consideration. This ability seems to be fostered in the design studio setting.

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]	[ ]

The graphic skills of students in the design and building technology courses are consistently strong. There is strong integration of digital media in the 400-level design courses and above.

13.4 Research Skills

Ability to *gather, assess, record, and apply relevant information in architectural coursework*

Met	Not Met
[X]	[ ]

This condition is found to be well met in a variety of coursework throughout the curriculum. The application of research in architecture coursework is particularly evident in the Technology sequence, in particular, Arch 546C, Climate and Light; Arch 346 and 347, Building Systems I and Building Systems II; as well as Arch 511, 512, and 611, Advanced Design Studios, and Arch 616, Degree Project.

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]	[ ]

This criterion is met in various ways. In Architectural History I (4283) students learn about the built environment from prehistory to the present and to understand two- and three-dimensional order and design traditions as found in many different cultures around the world. Students further demonstrate their understanding of ordering systems in many studio and workshop courses. Building Systems II (347) focuses on structure, enclosure, climate, and light as they relate to contemporary technical building systems. Students prepare drawings and build models to demonstrate various building systems.

13.6 Fundamental Skills

Ability to *use basic architectural principles in the design of buildings, interior spaces, and sites*

Met	Not Met
[X]	[ ]

The fundamental skills visible in the design courses are consistently strong.

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]	[ ]

Collaborative skills are developed in two ways: first, through the integrated design process demonstrated in Arch 347, Building Systems II; Arch 511 and 512, Advanced Design Studios; and Arch 616, Degree Project, and, second, through teaming opportunities in seminar lecture classes. Examples of integrated design showing understanding of an interdisciplinary process are covered also in 13.23, Building Systems Integration. Examples of team projects can be found in Arch 347, Building Systems II, and Arch 4284, Architectural History II, in which teams of students prepare and give a presentation or an architecture project, and Arch 339, Concepts and Principles, in which students prepare and present a talk on architecture theory and principles. Arch 646, Professional Practice, also introduces students to the complexity of interdisciplinary design teams.

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]	[ ]

There is clear evidence of the understanding of Western architectural canons and traditions in Arch 4284, Architectural History II, and Arch 339, Concepts and Principles, as well as application of this understanding in studio courses.

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]	[ ]

All students are exposed generally to non-Western design influences. Arch 339, Concepts and Principles, also introduces the non-Western tradition of feng shui in which students produce a paper that examines the implications of its use in urban planning and

design. Students who take Arch 4283, Architectural History I, obtain a broad overview of the divergent locational and cultural factors that have led to the wide variety of architectural expression experienced around the world. Further opportunities for individual explorations are offered by numerous elective courses, as well as by the semester-abroad program.

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*

Met	Not Met
[X]	[ ]

Admirable initiative is taken to expose students to a variety of design opportunities within many national and regional contexts across the curriculum. Arch 419, Core Studio, displays clear evidence of the exploration of the local context, including the vernacular tradition.

This criterion is covered in depth in the site planning course (Arch 552B), which utilizes written material to introduce the concept of regionalism and follows up with site visits to diverse representative examples in the St. Louis area (such as river bluff, flood plain, and oak savannah). Students then undertake projects to ensure that they understand the implications of these environments.

13.11 Use of Precedents

Ability to *incorporate relevant precedents into architecture and urban design projects*

Met	Not Met
[X]	[ ]

Precedents are used most effectively in two classes. In technical classes such as Arch 546C, Climate and Light, and Arch 347, Building Systems II, precedents or case studies are analyzed for integrated systems (structure, environmental, day lighting, and enclosure). In Arch 580, Design Thinking, students use precedents—both formal and building type—to help prepare for the design of the degree project.

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	Not Met
[X]	[ ]

Relationships between human behavior and the physical environment are explored in depth in Arch 339, Concepts and Principles, starting with writings that influenced early Western thought on the subject (Vitruvius and Alberti) and continuing with a nuanced progression through more contemporary sources.

In addition, the concepts related to the theories are taught in the M. Arch. 3 Design Studios (Arch 317, 318, and 419) and are considered a prerequisite for admission into the 4+2 program. The projects, from both the early courses and subsequent design courses taught as part of the master's program, exhibit a full understanding of these precepts.

13.13 Human Diversity

Understanding of *the diverse needs, values, behavioral norms, physical ability, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity for the societal roles and responsibilities of architects*

Met	Not Met
[X]	[ ]

Students develop an understanding of diverse needs, behavioral norms, physical ability, and social and spatial patterns through design studio and seminar/lecture classes. Examples of work from Arch 511, Advanced Design Studio, included investigations into patterns of human behavior, path studies, and analyses of various human interactions and socialization patterns. Readings in Arch 552, Site Planning, such as Stephen Harrison's *Patterned Ground: Entanglements of Nature and Culture*, and readings in Arch 339, Concepts and Principles, such as Jane Jacob's *The Death and Life of Great American Cities*, also provide the students with an understanding of human diversity.

Examples of diversity appeared in papers for Arch 4283, Architectural History I, and included topics such as "Jefferson and the Indians" and "The Dome of the Rock, Jerusalem."

13.14 Accessibility

Ability to *design both site and building to accommodate individuals with varying physical abilities*

Met	Not Met
[X]	[ ]

The concepts of Americans with Disabilities Act (ADA)/American National Standards Institute (ANSI) requirements are formally introduced in Arch 347, Building Systems II. Before that, a smattering of projects exhibited some comprehension of accessibility. After it, virtually all projects show an appreciation of what it takes to comply (such as, accounting for ramps, elevator access, and wheelchair turning radius in small spaces).

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	Not Met
[X]	[ ]

The team finds that the condition is met and that the school is doing an admirable job of putting the issue of sustainability at the forefront of student education. The team also recognizes initiatives taken on behalf of the students to organize sustainable initiatives related to their organization "Green Givens" as well as the organization of "master's classes" by the administration that illustrate sustainable issues in contemporary practice for students in a series of workshops.

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	Not Met
[X]	[ ]

The materials prepared in fulfillment of the Design Thinking course demonstrate that the students understand the process and end products of a comprehensive program for architecture projects. In several of the booklets reviewed, sites were analyzed in depth and precedents for specific building types were explored for incorporation into the subsequent final design.

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]	[ ]

Arch 552B, Site Planning, introduces the students to issues, including grading and topography, cut and fill, drainage, building orientation, landscape, and circulation patterns. This is done through a series of case studies and design exercises.

The ability to respond to natural and built site characteristics is most clearly demonstrated in Arch 616, Degree Project, through site analysis (also treated in Design Thinking), siting, layout, and clear evidence of designing within a given site context. Many of the projects have extensive site sections and demonstrate an understanding of grading lines and building orientation/siting. Because the focus of this studio is building design, there is less evidence of landscape design and development.

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]	[ ]

Arch 447A, Structures I, covers the forces in building systems as determined from dead, live, wind, seismic, and temperature loads as distributed among various building components. Studied effects include shear, moment, slope deflections, and stability.

Arch 443A, Structure II, covers the actual designs of structural elements in wood, steel, composite steel, and concrete.

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]	[ ]

Arch 546C, Climate and Light, covers the principles and appropriate application and performance of environmental systems, including lighting and climate modification systems and energy use integrated with the building systems and envelope.

Case studies are presented by students using a wide variety of building types to demonstrate their understanding of the environmental systems studied. Arch 544A, Acoustics and Lighting, first covers the theory of the science of acoustics. The properties of sound are examined and applied to principles of design for habitable spaces. Students demonstrate their understanding of voice control through a series of diagrams and writings that demonstrate techniques such as barriers, distance, quiet surfaces, mass, and isolation.

The lighting portion of Arch 544A augments the Climate and Light course in the learning of the lighting design process and lighting systems integration and controls. Learning is demonstrated by a series of case studies of existing spaces and the analysis of both day lighting and artificial lighting.

13.20 Life-Safety

Understanding of *the basic principles of life-safety systems with an emphasis on egress*

Well Met	Not Met
[X]	[ ]

The degree projects uniformly exhibit an understanding of life-safety systems and other code requirements, specifically including egress. Several projects go so far as to indicate space for sprinkler systems in sectional views.

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]	[ ]

An understanding of building envelope design is clearly demonstrated and well met through Arch 347, Building Systems II; students develop an understanding through case studies in which they analyze construction, materials, orientation, and energy consumption. Projects in Arch 616, Degree Program, include large-scale sections of building enclosure systems. The one thing these drawings are often missing is labels identifying materials and dimensions.

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]	[ ]

An understanding of building service systems is most clearly demonstrated in Arch 347, Building Systems II, which integrates basic building service systems, including chases for plumbing and wiring, electrical panels, and sprinkler systems.

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]	[ ]

Building systems integration is clearly demonstrated in Arch 347, Building Systems II, and Arch 511, 512, and 611, Advanced Design Studio. Included are case studies and the integrated design of structural systems and building envelope and environmental systems.

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]	[ ]

Understanding of building materials and assemblies as well as their application and performance is widely exhibited across the curriculum. The development of very detailed building sections and section models in Arch 616, Degree Project, and Arch 347, Building Systems II, presents strong evidence that students are able to assess the use of appropriate construction materials, products, and assemblies in the development of a comprehensive design.

13.25 Construction Cost Control

Understanding of *the fundamentals of building cost, life-cycle cost, and construction estimating*

Met	Not Met
[ ]	[X]

Understanding of the fundamentals of building cost, life-cycle costs, and construction estimating is not sufficiently addressed. While the idea of the architect's responsibility for cost estimating is mentioned in professional practice, there is no opportunity for the student to develop an understanding of the process and its impact on project costs or risk or at least not evident in the team room materials.

While energy consumption is addressed in the Climate and Lighting course, the broader fundamentals of life-cycle cost are not addressed or at least not evident in the team room materials.

13.26 Technical Documentation

Ability to *make technically precise drawings and write outline specifications for a proposed design*

Met	Not Met
[X]	[ ]

Arch 346, Building Systems I, studies a variety of building and structural systems, and the students demonstrate the knowledge learned by drawing detailed building sections and cutaway isometrics. These drawings are extensively noted with the material specifications. Arch 616, Degree Project, further demonstrates an understanding of building systems and their integration.

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	Not Met
[X]	[ ]

The client's role in architecture is clearly described in Arch 646, Professional Practice, a seminar class that is taught by a practicing architect. The criterion is addressed through role-playing, handouts, case studies, and quizzes.

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	Not Met
[X]	[ ]

There are many wonderful examples of comprehensive design projects in Arch 616, Degree Project; Arch 512, Architectural Design VI; and Arch 611, Architectural Design VII. The projects show strong development of the building envelope as well as integration of structure and program.

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	Not Met
[X]	[ ]

This criterion is met in Arch 646, Professional Practice, through the use of AIA contracts and the AIA Code of Ethics. The instructor, a practicing architect, uses role-playing, case studies, and quizzes. The students also interview a local architect about his or her practice and write a paper.

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	Not Met
[X]	[ ]

Arch 646, Professional Practice, is devoted to exposing the students to the realities of their chosen field. Within the limitations of a single semester, it covers all aspects as an overview and delves more deeply into contracts and legal concerns through a hypothetical legal action.

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	Not Met
[X]	[ ]

Student expectations about their initial years of employment, including the Intern Development Program (IDP) and internship requirements leading to registration, are shaped by the introduction provided by Arch 646, Professional Practice. That course is supplemented by a very active half-time career development coordinator and her student counterpart within the GAC. Between them, they sponsor and/or coordinate workshops, job postings, individual counseling, a job fair (with 46 firms scheduled to attend in March 2006), and firm tours.

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	Not Met
[X]	[ ]

Arch 646, Professional Practice, takes students through the organization of a typical architecture project and the leadership role of the architect.

The various participants are identified: clients, contractors and subcontractors, suppliers, code officials, financer/lender, and the architect with a team of consultants.

The course emphasizes the architect's leadership role in the design and project delivery and his or her interaction with the other project team members.

Role-playing by student teams is used to dramatize conflict resolution and contract negotiations when the architect is in a primary role.

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]	[ ]

Arch 646, Professional Practice, develops an understanding of the laws and regulations encountered in architecture practice. Students learn the responsibilities of the architect as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulations, and historic preservation and accessibility laws.

Students review, among other things, AIA documents, building codes, and other prototype documents and write papers discussing real-life practice situations.

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]	[ ]

Arch 646, Professional Practice, takes students through the AIA Code of Ethics. Students role-play case studies of ethical dilemmas involving architecture and design.

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III. Appendices

Appendix A: Program Information

1. History and Description of the Institution

The following text is taken from the 2005 Washington University in St. Louis Architecture Program Report.

The origins of Washington University date back to 1853, when William Greenleaf Eliot, a Unitarian Minister, with a group of prominent St. Louisans, developed the vision of a great institution of higher education west of the Mississippi. In his honor, it was named Eliot Seminary, although it never had a religious affiliation. The name of the institution was changed four years later at the insistence of Mr. Eliot to become the first institution of higher education to bear the name Washington University.

During its first half century Washington University was located at 17th Street and Washington Avenue in downtown St. Louis. Under the dynamic leadership of Robert S. Brookings, a St. Louis merchant, the University relocated to its present Hilltop campus at the edge of the city in 1905, surrounded by undeveloped land. University officials seized the opportunity to coordinate the development of a new campus with plans for the 1904 World's Fair and held an international architectural competition for the new campus plan. Cope and Stewardson, a Philadelphia architectural firm, won the competition. They had designed similar campus buildings at Princeton and a number of other campuses. The buildings constituting the Quadrangle were erected in time to be leased to the Fair to house the administrative offices of the Fair Authority. The main exposition buildings and exhibits were located in Forest Park immediately adjacent to the campus. In 1905 the University took possession of the buildings, using the rental fees from the Fair to continue the development of an extraordinarily successful architectural master plan.

Until the 1950s, Washington University was intentionally a local university, recruiting its students predominantly from the St. Louis area. At that time the decision was made to erect new residence halls and transform the student body of the University into a national one, enhancing its already high academic reputation.

Today, Washington University in St. Louis is an independent, nondenominational university of national stature. The student body is composed of 7,433 undergraduates and 5,947 graduate and professional students. The University's faculty and resources are concentrated upon this concentrated, highly selective community of students. Currently 88% of undergraduate students come from outside Missouri, and 59% come from greater than 500 miles beyond St. Louis. Virtually all US states and more than 80 nations are represented among the students.

In addition to the School of Architecture, other divisions of the University located on the main campus which offer undergraduate and graduate programs include: The College of Arts and Sciences (undergraduate), the Graduate School of Arts and Sciences (graduate), the School of Engineering and Applied Sciences and the Sever Institute of Technology (undergraduate and graduate), the School of Art (undergraduate and graduate — see below for current changes to the School of Art), the School of Social Work (graduate), the School of Law (graduate), and the School of Business (undergraduate and graduate). The School of Medicine, located on the eastern end of Forest Park, adjacent to major hospitals, offers additional graduate and professional degrees.

The emergence of Washington University in St. Louis as a national university over the past decades has been the result of carefully designed and implemented plans initiated by former Chancellor William Danforth and carried on by his successor Chancellor Mark S. Wrighton, who has just completed his tenth year as Chancellor. Chancellor Wrighton, the fourteenth Chancellor of the University, stated that his goal is to ensure that Washington University in St. Louis is one of the world's great universities to "best carry out the University's mission of teaching, research, and service to society." During his first decade as Chancellor, Wrighton focused upon strengthening the undergraduate education within the University. With the beginning of his second decade, Chancellor Wrighton is now developing an equally vigorous emphasis on the quality of graduate programs across the entire University.

The University has flourished under Wrighton's leadership. Undergraduate applications are at an all time high. In 2005, 21,115 applications were received for a freshman student body of 1,350. SAT scores have risen by 160 points in the past ten years. The University has consistently risen in the U.S. News and World Report rankings - from 17th in 1999 to 11th in 2004. An extremely successful capital campaign was concluded on June 30, 2004. The original $750 million goal was raised twice; the final $1.3 billion goal was exceeded and a total of *$1.55* billion was raised. In the past 10 years $406,716,480 has been spent on capital improvements. Twenty-one buildings have been built; this included eight residence halls at a cost of $65,986,780. Thirty-three buildings have had major renovations ($200,000 minimum budget) at a cost of $57,121,618.

One of Chancellor Wrighton's first initiatives when he arrived was the creation of a multi-disciplinary effort linking the School of Architecture with the School of Art, the Department of Art History and Archaeology, the Library and Gallery. Called the Sam Fox Arts Center, it was dedicated to three goals: enhanced opportunities for interdisciplinary study; the application of emerging digital technologies to scholarly and creative work; and the integration of visual literacy as a component in today's liberal arts education for all students.

In the past year the Sam Fox Arts Center has been reorganized into a new academic unit, the Sam Fox School of Design & Visual Arts, which will be formally inaugurated on July 1, 2006. It will integrate the Schools of Architecture and Art with the Kemper Museum of Art. Within this new organization, the School of Architecture's undergraduate and graduate programs receive the separate distinctions of the College of Architecture and the Graduate School of Architecture & Urban Design. The School of Art's undergraduate and graduate programs will also be distinguished as the College of Art and the Graduate School of Art.

The positioning of these disciplines and programs within the newly structured Sam Fox School of Design & Visual Arts will provided increased stature for architecture and the arts within the University, increased financial stability, increased interdisciplinary opportunities (a University wide initiative) and the increased ability to project the value of architecture, design and art to a much larger public audience. Simultaneously, it must be emphasized that necessary programmatic autonomy and the integrity of the professional curricula will be maintained.

The establishment of this multidisciplinary effort has had a significant physical impact on the buildings devoted to Architecture and Art. There are three existing buildings. Two are Beaux Arts buildings built in the 1930's, Bixby Hall for Art and Givens Hall for Architecture. Between them is Steinberg Hall, built in 1960 by the then young Japanese architect, Fumihiko Maki, when he was a faculty member at Washington University.

Steinberg Hall currently contains the Art and Architecture Library, the Kemper Art Museum, the Department of Art History and Archeology (in the College of Arts & Sciences) and an auditorium.

In the summer of 2001 both Givens and Bixby were renovated for a total cost of $16 million. This was their first major-renovation; Givens Hall had not been fully air-conditioned previously. These renovations involved installing all new mechanical and life-safety systems. Additionally all original windows were replaced with thermally efficient units. The design studio levels of the building were opened up, wired for digital technology, and furnished with new workstations.

Starting in 2004, construction began on two additional buildings for the Sam Fox School of Design & Visual Arts. The two new buildings are also designed by Fumihiko Maki, by now a Pritzker Prize winner (1993). The first, a 70,022 square foot structure, will house the Mildred Lane Kemper Art Museum and the Nancy and Ken Kranzberg Art and Architecture Library, the Whitaker Media Laboratory and the Department of Art History and Archaeology (of the College of Arts and Sciences). The second building, Walker Hall, will be a 40,367 square foot addition to the Art program. When these buildings are complete, Steinberg Hall will be renovated to provide additional space for the Architecture and Art programs. Upon completion, Washington University in St. Louis will have invested $61 million to renovate all three existing buildings and to construct the two new buildings.

The complex of buildings will thus offer an expanded interdisciplinary context for the technical, artistic and historical production of art and architectural objects as well as digital facilities.

The University has continued a commitment to being a comprehensive university, with balanced attention to undergraduate, graduate and professional study and research. Particular attention has been paid to the interrelationships among its various schools and to the maintenance of the relatively moderate size it currently enjoys. Important as well is the institution's commitment to an active interplay between scholarship and teaching and between undergraduate and post-baccalaureate study. Under Chancellor Wrighton, the legacy of Washington University in St. Louis is being taken into the first rank of world research universities to new heights by the university-wide effort to accelerate the ascent of the University.

2. Institutional Mission

The following text is taken from the 2005 Washington University in St. Louis Architecture Program Report.

Approved by the University Council in July 2002, the following statement is available in University publications and on the University website.

Committed to Our Students:
Washington University's educational mission is the promotion of learning -- learning by students and by faculty. Teaching, or the transmission of knowledge, is central to our mission, as is research, or the creation of new knowledge. The faculty, composed of scholars, scientists, artists and members of the learned professions, serves society by teaching; by adding to the store of human art, understanding, and wisdom; and by providing direct services, such as health care.

Central to our mission are our goals, which are to foster excellence in our teaching, research, scholarship, and service; to prepare students with the attitudes, skills, and habits of lifelong learning and with leadership skills, enabling them to be useful members of a global society; and to be an exemplary institution in our home community of St. Louis, as well as in the nation and in the world.

Through our goals Washington University intends to judge itself by the most demanding standards; to attract people of great ability from all types of backgrounds; to encourage faculty and students to be bold, independent, and creative thinkers; and to provide the infrastructure to support teaching, research, scholarship, and service for the present and for future generations.

Washington University Environment, Health, and Safety Mission Statement

Washington University is committed to conducting research, teaching and patient care in a safe and healthy environment and to environmental stewardship. The University will:

- *Serve as a role model and community leader in these areas;*
- *Continually review its impact on health, safety and the environment;*
- *Seek innovative ways to prevent environmental pollution; and*
- *Constantly examine its compliance with relevant legislation and regulations.*

3. Program History

The following text is taken from the 2005 Washington University in St. Louis Architecture Program Report.

Architecture was mentioned in the University catalog as early as 1871, but the original instruction was in structural technology rather than an integrated study of design and planning. In 1902, the Department of Architecture was formally established as part of the School of Engineering and Architecture. During the tenure of Chancellor David F. Houston (1908-1913), architecture achieved a distinct identity at the University. A definitive commitment to the importance of design was developed in the curriculum and Houston recruited John Beverly Robinson of Columbia University, the chief architect for the New York City public schools, and Charles Abella of the Ecole des Beaux Arts in Paris, whom Houston called "a genius both as a designer and as a teacher," as the first two professors of design. The School of Architecture was established as an independent division of the University in 1910 during Houston's tenure as Chancellor. In 1912 the School was one of eight founding members of the Association of Collegiate Schools of Architecture (ACSA).

In 1932 a generous gift in memory of Joseph W. and Kate Abbey Givens resulted in the construction of Givens Hall, a compact and elegant building designed in a modernized Beaux-Arts manner, which has since housed the School.

Past deans include Joseph Murphy (1949-1952), Buford Pickens (1953-1958), Joseph R. Passonneau, (1956-1967), George Anselevicius (1968-1973), Constantine Michaelides, (1973-1993) and Cynthia Weese, (1993-2005). During Dean Passonneau's memorable tenure, the School introduced a two year base of liberal arts studies which ultimately led to the development of the six year "4 + 2 program". He launched an acclaimed program of advanced study in urban planning and design, and initiated an outstanding visitors program that continues today. Steinberg Hall, designed by then faculty member Fumihiko Maki (and future Pritzker Prize winner) and completed during

Dean Passaneau's tenure, contains the Art and Architecture Library, the Mildred Lane Kemper Art Museum (housing the University art collections), and a 300 seat auditorium.

During Dean Michaelides' administration the number of students grew and the enrollment of women increased substantially. Additionally the School began three dual degree professional programs: the joint MArch/MBA with the Olin School of Business, the MArch/MSW with the George Warren Brown School of Social Work and the MArch/MCM with the Department of Construction Management in the Sever Institute of the School of Engineering.

Under Dean Weese's leadership the focus was to further emphasize four areas: the graduate professional curriculum, the faculty, the physical plant and a capital campaign.

The Graduate Program and Curriculum:

The Graduate Program was substantially strengthened and the number of students enrolled was increased by 50%. Particular areas of focus include: the development of the Degree Project, providing a strong closure to the student's advanced study in architectural design studios; the integration of urban design and landscape design coursework; the enhancement and integration of digital technologies; the development of a building technology sequence of courses; and finally, the establishment of international semesters abroad as part of the sequence of advanced semesters. The Graduate Program currently offers three opportunities to spend a full semester abroad: students can elect to go to Buenos Aires, Argentina, Helsinki, Finland or Tokyo, Japan, for a full semester of studio and coursework. Additionally, the Graduate Program offers a 9-credit (studio and seminar) summer program in Barcelona, Spain. Courses are *taught in all of* these programs by local architects and academics appointed by the School; the planning of these semesters is under the direction of the Dean and Professor Adrian Luchini, the Director of International Studies.

Faculty:

During Dean Weese's tenure, substantial effort has been put toward the recruitment and retention of outstanding new faculty. Two chaired professorships were created, The Raymond E. Maritz Professor of Architecture, held by Adrian Luchini, and The Rebecca and John Voyles Professor of Architecture, held by Paul Donnelly. Faculty members Gia Daskalakis, Robert Hansman, Stephen Leet and Eric Mumford have all achieved tenure since 1999. At the time of the last accreditation visit there were two new tenure track faculty. Today, there are nine tenure track faculty, all concentrating in design with parallel focuses in landscape design, urban design, digital design, architectural history and theory, and building technology. In addition, a tenure track review and evaluation process has been established. The program continued its dedication to inviting highly regarded practitioners from North America and abroad as visiting faculty. Notable participants have included Juhani Pallasmaa, Brian Healy, Julie Snow, Brian Mackay-Lyons, Einar Jarmund and Hakon Vigsnaes, Marlon Blackwell, Tom Oslund, and Pritzker Prize winner Glenn Murcutt.

Physical Plant:

During his tenure, Chancellor Wrighton has made a significant commitment to architecture and the arts at Washington University. He has shown this in both organizational change and in facility improvements. When he arrived in 1995 he envisioned and initiated a consortium of the Schools of Architecture and Art, the

Department of Art History and Archaeology in the College of Arts and Sciences, the Art and Architecture Library and the museum. This grouping fulfilled three goals: enhanced opportunities for interdisciplinary study: the application of emerging technologies to scholarly and creative work; and the integration of visual literacy as a component in today's liberal arts education for all students. Until 2005 this consortium was referred to as the Sam Fox Arts Center.

In 2005 the chancellor further refined the organization of this consortium with the creation of a new fiscal and academic unit - the Sam Fox School of Design & Visual Arts - which includes the Schools of Architecture and Art and the Mildred Lane Kemper Museum of Art. This new school will build on the work of the Sam Fox Arts Center providing a structure encouraging collaborative work in Architecture and Art. A search for the Dean of the Sam Fox School of Design & Visual Arts is currently underway; the goal is to name the Dean in December of 2005.

The physical resources of the school were substantially improved during Dean Weese's tenure. Givens Hall was completely renovated in the summer of 2001. Two new structures, designed by Fumihiko Maki are under construction and will be completed in the summer of 2006. The first will house the Kemper Art Museum, the Kranzberg Art and Architecture Library and the Department of Art History and Archaeology, functions currently located in Steinberg Hall. The second new building is a studio arts addition to the School of Art. Programming for the renovation of Steinberg Hall has begun; Architecture will gain 10,000 additional square feet of studio, review and classroom space in this project. The renovation will begin as soon as the new buildings are complete. The total cost for the renovation of the existing physical plant and the new construction for the completion of the Sam Fox School of Design & Visual Arts will be over $61 million.

Capital Campaign:

During Dean Weese's tenure the School defined needs that led to a goal for a capital campaign of $13.8 million. When the campaign closed on June 30, 2004, the school had exceeded its goal by 16% and raised $16.05 million. In addition to the renovation of Givens Hall, during the capital campaign, Architecture

- Increased its endowment by $72%, from 15.1M to $25.9M
- Increased its Annual Fund support by 128%, from $145K in FY95 to $331K in FY04
- Increased the number of scholarships from 16 in FY 96 to 80 in FY04
- Added three endowed professorships
- Rebecca & John Voyles Professorship (held by Professor Paul Donnelly) -
  Raymond E. Maritz Professorship (held by Professor Adrian Luchini)
- JoAnne Stolaroff Cotsen Professorship (to be filled)
- Increased its Eliot Society membership (annual gifts of $1000) from 45 in FY95 to 103 in FY04
- Instituted alumni programs in New York, Boston, Chicago and San Francisco, cities with a significant number of architecture alumni

Beginning July 2005, Jerome Sincoff, FAIA, became the new dean of the School of Architecture (in anticipation of the Sam Fox School, in August of 2005 the new nomenclature of the College of Architecture and the Graduate School of Architecture & Urban Design has been approved). Dean Sincoff is the former President and CEO of Hellmuth, Obata and Kassabaum, one of the largest architecture firms in the world. Under his visionary leadership, HOK became an international presence with the creation

of seven new offices outside the US (Asia, North America, South America and Europe). The firm is also recognized for its strong commitment to sustainability and it's HOK University. Dean Sincoff has identified the following goals for the 2005-06 year: 1) appointment of a permanent dean to the College of Architecture and the Graduate School of Architecture & Urban Design after the dean is named for the Sam Fox School of Design & Visual Arts, 2) preparation for the accreditation visit, 3) continued focus on the graduate and undergraduate programs, 4) review of the School's tenure document, 5) increasing the financial resources of the School and 6) emphasis on implementation of the Sam Fox School of Design & Visual Arts.

Curricular History and Outlook

The School of Architecture was the first school in the United States to offer a six-year program as an alternative option to a five-year Bachelor of Architecture degree, starting in 1956-57. This six-year curriculum became the School's sole program when the five-year curriculum was eliminated in 1961. Since then the program has evolved in such a way that the undergraduate Bachelor of Science in the Architectural Sciences Degree awarded by the School of Architecture was replaced in 1963-1964 by a Bachelor of Arts Degree with a major in Architecture awarded by the College of Arts and Sciences.

In May of 1999, based on two years of faculty review, an undergraduate Bachelor of Science degree in Architecture was added. Undergraduate students in the School of Architecture now have the option of one of two degrees from the College of Arts and Sciences, the Bachelor of Arts degree and the Bachelor of Science degree. The Bachelor of Arts degree (4 + 3) has a more liberal arts based curriculum with 46 of a total of 120 units required for the major in Architecture. Three years of graduate work are required for completion of the professional Master of Architecture degree. The Bachelor of Science degree (4 + 2) has a more intensive architecture concentration with 70 of a total of 120 units required for the major in Architecture. Completion of the professional Master of Architecture degree requires an additional two years.

Current planning efforts have identified the need to re-examine the undergraduate program. As the University attracts the most highly qualified student applicants, the faculty perceive that the interests of these students have broadened. Additionally, opportunities for collaboration in design between the various units within the Sam Fox School of Design & Visual Arts create further emphasis on cross disciplinary studies, already a university wide initiative.

In 1967 the first professional degree awarded by the School became the Master of Architecture rather than the Bachelor of Architecture degree. While the School's professional degree program has always been strong, in the past ten years in particular the Master of Architecture degree has been refined and strengthened, and the number of applications and overall enrollment has also increased.

The School's seven semester MArch 3 program forms the overall basis for the graduate program. The seven semesters are divided into three elements: a three semester core sequence, a three semester advanced sequence, and a one semester Degree Project term. Students with strong backgrounds in architectural studies are considered for selective entry into the School's MArch 2 and 2+ programs, curricula of four and five semesters respectively, of which three semesters are spent in the advanced design studio semesters.

The three-semester graduate core sequence for students in the March 3 program focuses on building a foundation for the practice of architecture. Its primary role is to prepare students for the complexities of the advanced semesters. Throughout these

three initial semesters, students are exposed to a broad view of issues relevant to architecture and contemporary practice. Within these core semesters, students are expected to acquire a general disciplinary knowledge base; an understanding of, and ability to exercise, the design process; agility in the conventional and generative use of the various forms of representation in design activity and presentation; and the ability for discernment and critical thought. The core sequence also emphasizes the development of a strong work ethic (consistency and intensity) through discipline, rigor, perseverance, resourcefulness, and continual experimentation. The core sequence provides basic skills and knowledge, but also is intended to inspire passions, provoke new modes of thinking, spark creativity, and build confidence.

The three core design studios are carefully sequenced to build on knowledge and skills from one to the other and to incrementally reach greater levels of complexity through the engagement of broader frameworks. The first core studio serves as an introduction to all aspects of a design problem, working from initial abstract premises of abstraction to a final site and program project of the semester aiming at a greater degree of concreteness and synthesis to serve as a bridge to the second core. The second core studio deals repetitively with a fully synthetic design process and places great attention on building fabric and formal principles. Projects focus on local urban infill sites and small-scale institutional and commercial programs. The third core studio works with medium- scaled projects and emphasizes the synthesis of more complex and diverse criteria. Projects engage the complexities of hybrid programs with a variety of spatial requisites; they originate in more difficult urban sites and end with landscape contexts.

The next three semesters are the advanced design studio semesters. They center on the design studio as the site for synthesis and integration of conceptualization, research, and development through technology and media across *the full range of* design scales. Design studio is paralleled by advanced work in building technologies, architectural history and theory and urban and landscape design issues. Each semester offers studios given by the School's permanent faculty and by visiting professor-practitioners. Additionally students can spend one, or at most two, terms in one of the School's international program locations.

As a part of the advanced semester sequence a full semester of design and seminar coursework is offered abroad each semester: in Buenos Aires, Argentina; Tokyo, Japan; Helsinki, Finland; and in Barcelona, Spain. These international semesters combine the intensity of the School's teaching with the vitality of these locations, each possessing a rich architectural culture. MArch 2 students can realistically incorporate one international semester in their curriculum while MArch 3 students can envision two of the three advanced semesters abroad. The Barcelona summer *program is now in its 13th year.* The Buenos Aires, Helsinki and Tokyo programs were established between two and five years ago. The programs are taught by local architects and academics under the direction of Professor Adrian Luchini, Director of International Studies.

The professional degree program's final semester, the Graduate Degree Project, provides a strong closure to the student's advanced study in architectural design studios. Through the Degree Project, all students in their final semester in the professional degree programs have the opportunity to test and challenge their capacity to initiate and develop design proposals and to carry through a design project that they have formulated independently.

The Degree Project consists of two parts. The first is a preparatory phase in the penultimate semester during which the students take the class "Design Thinking." Their goal for that semester is to establish a conceptual framework for their proposal, to formulate a program and to select a site. These proposals are reviewed at the end of the

Appendix B: The Visiting Team

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Observer
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608 238-2661

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Appendix C: The Visit Agenda

Saturday, 25 February

Team arrival and check-in at the hotel. Team introductions and orientation.

6:00 p.m. Team meets at Knight Center, walk/drive to Givens Hall
Team members walk through the exhibits with Dean Jerry Sincoff and Associate Dean Peter MacKeith

7:00 p.m. Team dinner at Cardwell's in Clayton

Sunday, 25 February

8:00 a.m. Team-only breakfast at Knight Center in O'Donnell Lounge or break-out room #500
Architecture Program Report (APR) review and assembly of issues and questions

9:00 a.m. Meet at Givens Hall/Overview of the Team Room in Steinberg Hall by program administrators/Initial review of exhibits and records
Carmon Colangelo, Sam Fox School of Design & Visual Arts Dean-designate
Jerry Sincoff, Dean
Peter MacKeith, Associate Dean
Paul Donnelly, Co-Director Graduate Program
Adrian Luchini, Co-Director Graduate Program

10:30 a.m. Visiting team sets up in Team Room

Noon Gourmet Box lunch in Team Room

1:30 p.m. Tour Givens Hall/Discussion of new and renovated facilities/View faculty exhibition

2:30 p.m. View undergraduate program room in Givens Hall, rooms 113 & 115
Iain Fraser, Co-Director Undergraduate Program
John Hoal, Co-Director Undergraduate Program

3:00 p.m. Entrance meeting with tenure and tenure-track faculty in Givens Hall, room 204

4:00 p.m. Review of exhibits and records in Team Room

6:00 p.m. Team-only dinner at Chez Leon in Central West End

8:00 p.m. Team working session in break-out room at Knight Center or Team Room in Steinberg Hall

Monday, 27 February

8:00 a.m. Team breakfast at Knight Center in room 245 with Dean Jerry Sincoff and Associate Dean Peter MacKeith

9:00 a.m. Entrance meeting with Chancellor Mark Wrighton Chancellor's office in North Brookings Hall room 228

10:00 a.m. Continued review of exhibits and records in Team Room

12:00 p.m. Lunch with Graduate Architecture Council student officers, AIAS officers and (undergraduate) Architecture Student Council president in Givens Hall, room 118

1:00 p.m. Meeting with graduate students in Givens Hall, Kemp Auditorium (room 116)

2:00 p.m. Continued review of exhibits and records/observation of design studios

4:00 p.m. Meet with History/Theory faculty in Givens Hall, room 204 (or Team Room if permissible)
Discuss architecture history sequence
Associate Professor Eric Mumford
Assistant Professor Paula Lupkin

4:30 p.m. Meet with Building Technology faculty in Givens Hall, room 204 (or Team Room if permissible)
Discuss building technology sequence
Professor Paul Donnelly
Assistant Professor Jane Wolff
Affiliate Assistant Professor Michael Repovich
Affiliate Assistant Professor Phillip Shinn

5:00 p.m. Meet with Degree Project Instructors in Givens Hall, room 204 (or Team Room if permissible)
Review comprehensive studio requirement, professional practice course requirements
Professor Paul Donnelly
Affiliate Associate Professor Phil Holden
Professor Adrian Luchini
(Affiliate Assistant Professor George Johannes will join for professional practice discussion)

6:00 p.m. Reception with faculty, administrators, alumni/ae, and local practitioners in Givens Hall, room 204

7:00 p.m. Team-only dinner at Luciano's in Clayton

8:30 p.m. Continued review of exhibits and records in Team Room

Note: At 7:00 p.m. the school's Monday Night Lecture Series is hosting Antoine Picon, Professor of Architecture and Technology & Director of Doctoral Programs, Graduate School of Design, Harvard University. The lecture will be held in Steinberg Auditorium. Team members are invited to attend.

Tuesday, 28 February

8:00 a.m. Team breakfast at Knight Center with Jerry Sincoff, Dean and Associate Dean Peter MacKeith in room 245

9:00 a.m. Discuss school financial structure in Givens Hall, room 105A
Dean Jerry Sincoff
Assistant Dean for Finance Bobbe Winters

Team divides for three simultaneous meetings.

9:30 a.m. Discuss alumni/ae relations and development in Givens Hall, room 105A
Dean Jerry Sincoff
Director of Development Ron Van Fleet

9:30 a.m. Discuss career services in Givens Hall, room 204
Director of Career Development Erika Fitzgibbon
Associate Dean Peter MacKeith

9:30 a.m. Meet with Shirley Baker, Vice-Chancellor of Information Technology &
Dean of University Libraries and members of the Art & Architecture Library staff
Meet in Art & Architecture Library conference room in Steinberg Hall

10:00 a.m. Observation of lectures and seminars in Givens Hall and Steinberg Auditorium
AR 4285 Architectural History I: Pre-Modern Encounters in World Architecture
AR 562D Community Development I
AR 646 Professional Practice I

10:45 a.m. Meet with Richard Viehmann, Systems Administrator, and Leland Orvis, Shop Manager, in Givens Hall, rooms 3 and 10

11:00 a.m. Meet with members of the architecture staff in Givens Hall, room 204

12:00 p.m. Team lunch with tenure-track faculty in Givens Hall, room 204

1:00 p.m. Continue review of exhibits and records in Team Room

7:00 p.m. Team-only dinner at I Fratellini in Clayton

8:30 p.m. Accreditation deliberations and drafting the Visiting Team Report (VTR)

Wednesday, 1 March

7:00 a.m. Team breakfast at Knight Center with Dean Jerry Sincoff and
Associate Dean Peter MacKeith in room 245

8:00 a.m. Exit meeting with Chancellor Mark Wrighton in Chancellor's office
North Brookings Hall, room 228

9:00 a.m. School-wide exit meeting with the faculty, staff, and students in Steinberg Auditorium

11:00 a.m. Check out of hotel

Team lunch and team member departures

Notes:

The Team Room is equipped with a Dell 530 Precision desktop computer with Microsoft Office loaded on it and it is hooked up to a digital projector. There is also an HP laser jet black-and-white printer. The entire room has an open-access wireless system so team members can use their own laptops wirelessly.

Team member Ralph Jackson will have a car as he is driving to St. Louis. It would probably be best for another member of the team to rent a car during the visit for comfort and flexibility.

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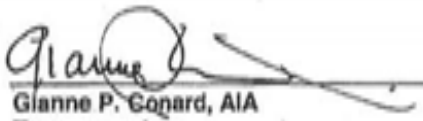
IV. Report Signatures

Respectfully submitted,

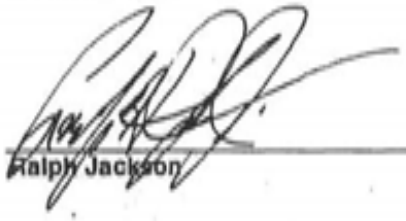
Peter Steffian, FAIA — **Representing the NCARB**
Team Chair



Gianne P. Conard, AIA — **Representing the AIA**
Team member

Beverly Frank — **Representing the AIAS**
Team member

Thomas Fowler, IV — **Representing the ACSA**
Team member



Ralph Jackson — **Observer**

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IV.4.7 Catalog (or URL)

Graduate Program online bulletin and related material can be found at
http://samfoxschool.wustl.edu/programs/march

The 2010-2011 Bulletin of the Graduate School of Architecture & Urban Design is available in printed and bound form; copies will be sent to NAAB and made available to the Visiting Team upon request prior to their visit.