

University at Buffalo, State University of New York
Department of Architecture, School of Architecture and Planning

**Architecture Program Report 2015 NAAB Visit for
Continuing Accreditation**

M.Arch

Track I (preprofessional degree plus 64 graduate credit hours)

Track II (undergraduate degree plus 112 graduate credit hours)

Year of the Previous Visit: 2012

Current Term of Accreditation: Three-year term of accreditation

Submitted to: The National Architectural Accrediting Board
Date: Sept 10, 2014

Program Administrator: **Omar Khan (Chair)**

Chief administrator for the academic unit in which the program is located: **Robert G. Shibley (Dean)**

Chief Academic Officer of the Institution: **Charles F. Zukoski (Provost)**

President of the Institution: **Satish K. Tripathi**

Individual submitting the Architecture Program Report: **Omar Khan**

Name of individual to whom questions should be directed: **Omar Khan**

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Part One (1). Institutional Support and Commitment to Continuous Improvement

1.1. Identity and Self-Assessment

1.1.1. History and Mission

A. The University at Buffalo- History and Mission

The University at Buffalo (UB) was founded in 1846 as a private medical college and merged with the State University of New York (SUNY) system in 1962. Today, UB is a flagship institution in the SUNY system, the state's premier public center for graduate and professional education and its largest and most comprehensive campus. UB's enrollment is the largest and its range of academic programs the widest of any public institution in New York and New England. UB is one of only two public universities in New York and New England to be admitted into the Association of American Universities (AAU), an association of the nation's leading public and private research universities.

The University at Buffalo views the tripartite mission of the land-grant and state university-research, teaching, and public service-not as separate or discrete actions, but as interdependent activities that inform and enhance each other within the university mission. As a public research university, UB has an institutional commitment to serve the public through excellence in research, teaching, and service. It also has an institutional commitment to bring the benefits of its research, scholarship, teaching, and creative activities to the members of its communities so the understanding of their worlds and the quality of their lives may be enhanced.

The SUNY system is governed by a Board of Trustees which directly determines policies for the campuses. In 2004, under President Simpson and Provost Tripathi's leadership a university plan, titled UB2020, was initiated for achieving enduring academic excellence. Thousands of individuals- faculty, researchers, administrators, staff and students- across campus debated and strategized to help develop the plan. Its vision is to:

- 1) **Cultivate Strategic Strengths:** by focusing resources on academic and research strengths. This involves organizing faculty research, scholarship and creative activity around specific interdisciplinary agendas and attracting top faculty and researchers across all areas of study.
- 2) **Build UB:** by expanding and improving the quality of UB's physical plan in order to provide an open place of learning and a generator of new ideas that sets a standard of academic excellence and serves a diverse population in today's knowledge-based society.
- 3) **Transform Operations:** by better aligning operational services, such as human resources, information technology and sponsored programs, for efficient service, process delivery and cost savings that can be reinvested in our university's research and academic goals.

The appointment of former Provost Tripathi as the University President in 2011 ensures a continuity of leadership in implementing UB2020. Among the many results will be a university that is bigger in size, sharper in both focus and physical appearance, and stronger academically than ever before. While UB2020 is attuned to the current needs of the university community, it also seeks to position UB ahead of important national and international trends in education:

- The increasingly multidisciplinary nature of sponsored research
- The imperative for universities to embrace innovation and collaboration

- Research, education, and service that is interconnected across local, national, and international boundaries.

As a result of UB 2020, eight distinguished, cross-disciplinary areas of strategic strength indigenous to the University at Buffalo have been identified:

- Artistic Expression and Performing Arts
- Civic Engagement and Public Policy
- Cultures and Texts
- Extreme Events: Mitigation and Response
- Health and Wellness Across the Life Span
- Information and Computing Technology
- Integrated Nanostructured Systems
- Molecular Recognition in Biological Systems and Bioinformatics

In 2013, newly appointed Provost, Charles F. Zukoski launched seven task forces to develop recommendations for priorities, cost, timelines, and implementation strategies related to Realizing UB 2020 goals and initiatives. Each of these task forces included members representing perspectives from across the university, and each was tasked with a charge and specific deliverables. The outcome of this process has resulted in signature and priority recommendations including:

- Communities of Excellence
- Innovation Scholars
- New General Education curriculum
- Significant International Experience
- Experiential learning programs
- Inter-Professional Education
- Expanded Undergraduate Academies
- Pedagogical excellence and innovation
- Enhanced engagement activities
- Young alumni programs
- Enhanced student recreational opportunities and facilities
- Heart of the Campus

Of these, the Communities of Excellence has initiated the creation of the Research and Education in eEnergy, Water and Environment (RENEW) Institute.

Because of its size and the variety of its programs, UB is a university in the richest sense. Along with graduate and professional education, it also displays remarkable breadth, diversity, and quality in undergraduate programs in the humanities, natural sciences, social sciences, fine arts, and a variety of undergraduate pre-professional programs. In short, New York State's major public university provides unparalleled opportunities for learning, career preparation, and developing a rewarding way of life.

Students take their place here among a diverse community of nearly 30,000¹ students, pursuing their interests from more than 100² undergraduate programs, more than 60³ minors, and over 200 graduate

1 Source: <http://www.provost.buffalo.edu/APB/OIA/Common-Data-Sets/CDS2012-2013.pdf>

2 Source: http://www.buffalo.edu/about_ub/ub_at_a_glance.html

programs⁴. They participate in the research of our approximately 1,400 full-time and 1,100 part-time faculty⁵ and over 160⁶ research centers. In 2013, UB is one of the most attractive destinations for international students: we rank 18th in the U.S. in international enrollment at 5,804 or 20% of our total enrollment of 28,952.⁷ UB also sends our students out into the world: in 2013 – 2014, approximately 7% of all UB students (11% undergraduates and 3.5% graduates) participate in study abroad through over 50 programs in 30 countries.⁸ In support of its efforts to increase participation, UB has signed on to the national “Generational Study Abroad” commitment to double the number of undergraduates studying abroad—to 20 percent by 2020.

More than 230,000 alumni live in every state and in 130 countries around the world.⁹ Among our celebrated graduates: NASA's lead astronaut for medical issues, the Minister for Higher Education in the People's Republic of China, the founder of Miramax Films, the Washington Post's Pulitzer Prize-winning editorial cartoonist.

UB has an annual economic impact of \$1.7¹⁰ billion on Western New York and New York State and supports ~14,000¹¹ jobs in Erie and Niagara counties. UB spends more than \$360 million annually on research, an increase of \$37 million since 2007, creating new knowledge that improves the lives of residents of Western New York, New York State and the world beyond.

As the University at Buffalo is the state's largest and most comprehensive public university, it is spread across three campuses and a wide array of research institutes, centers, and laboratories.

North Campus: UB's North Campus, where most of the university's core academic programs are offered, is located in suburban Amherst. Opened in the early 1970s, the North Campus currently has more than 100 buildings and more on the way, including ongoing construction of new apartment-style student housing, as well as state-of-the-art academic buildings.

South Campus: The picturesque South Campus, located four miles away from the North Campus in a residential section of Buffalo, was the university's home for much of the twentieth century. Here, ivy-covered buildings and a historic bell tower complement new research and teaching facilities. The schools

3 Source: <http://undergrad-catalog.buffalo.edu/academicprograms/minors.shtml>

4 Source: http://www.buffalo.edu/about_ub/ub_at_a_glance.html

5 Source: UB Office of Institutional Analysis

6 Source: <http://www.buffalo.edu/research.html>

7 The data comes from the “Open Doors 2015” report issued Nov. 15 by the Institute of International Education (IIE) and published on the UB web page: [http://www.buffalo.edu/internationaladmissions/news-and-announcements.host.html/content/shared/university/news/ub-reporter-articles/stories/2013/open_doors_2013.detail.html](http://www.buffalo.edu/internationaladmissions/news-and-announcements/host.html/content/shared/university/news/ub-reporter-articles/stories/2013/open_doors_2013.detail.html) and UB enrollment as published in: <http://www.provost.buffalo.edu/APB/OIA/Common-Data-Sets/CDS2012-2013.pdf>

8 Source: <http://www.buffalo.edu/studyabroad.html> , http://www.buffalo.edu/global_reach/study-teaching-and-research-abroad.html and personal correspondence with Mary Odrzywolski, Director of Study Abroad Programs at UB (maryodrz@buffalo.edu) dated 7/22/14)

9 University at Buffalo Office of Institutional Analysis and the Office of Alumni Relations as published on the UB web page: http://www.buffalo.edu/about_ub/ub_at_a_glance.html

10 Source: http://www.buffalo.edu/about_ub/ub_at_a_glance.html

11 Source: http://en.wikipedia.org/wiki/University_at_Buffalo,_The_State_University_of_New_York

of Architecture and Planning, Medicine and Biomedical Sciences, Dental Medicine, Public Health and Health Professions, Nursing, and Pharmacy and Pharmaceutical Sciences are on the South Campus. In addition, UB's Anderson Art Gallery is located adjacent to the South Campus.

Downtown Campus: UB's presence in downtown Buffalo is growing substantially, at the opposite end of our South Campus urban anchor. The cornerstone downtown is our New York State Center of Excellence in Bioinformatics and Life Sciences which opened in 2006. Complementing this in the surrounding area is the Jacobs Executive Development Center, the Research Institute on Addictions, the Educational Opportunity Center, the Jefferson Family Medicine Center, and, the Ross Eye Institute. Scheduled for 2016, the School of Medicine and Biomedical Sciences will be moving downtown into a new building designed by HOK. This new building is the result of a competitive RFP process that included a shortlist of internationally recognized firms.

B. The School of Architecture and Planning (SAP) and the Department of Architecture- History and Mission

The State University of New York Board of Trustees authorized the establishment of the School of Architecture and Planning at the University at Buffalo in 1967. Today, it remains the only School of Architecture and Planning within the SUNY system and offers accredited professional degrees in architecture and urban planning.

John Eberhard, the first dean of the School, was appointed in 1968 and began to plan a curriculum and assemble a faculty with classes beginning in the spring of 1969. Eberhard and his founding faculty engineered an innovative approach to the teaching and thinking about architecture and planning, formulating a School on the broadly based concept of environmental design. They developed a pedagogy rooted in the idea that the design of the environment was dependent on processes, both systematic and humane, and emphasized technological and social issues. Dean Harold L. Cohen joined the School in 1974 and was a major architect of its growth. He recruited notable faculty, Peter Reynar Banham, Magda McHale, William Huff, and staff that almost doubled its size, moved it to Hayes Hall on the UB South Campus and established the School's Library.

Following Dean Cohen's retirement, Dr. Michael P. Brooks became dean (1984-87) followed by Interim Dean Judith E. Albino (1987-88). Bruno B. Freschi, O.C., (1988-1999) continued to build on this solid foundation, establishing the School's annual Clarkson Visiting Chair as well as *Intersight*, the School's academic journal. Between 1999 and 2002, Acting Dean Thomas E. Headrick, and Interim Deans John B. Sheffer, II and Dr. Kenneth J. Levy provided the leadership of the School. From 2003-2010, under Dean Brian Carter the school's lecture series was expanded and the Buffalo Books series was established. In 2011, Professor Robert G. Shibley, FAIA, was appointed Dean.

The Department of Architecture is one of two departments in the School of Architecture and Planning. It was chaired by George Anselevicius, FAIA, from 1976 to 1981 and then by Robert G. Shibley, AIA, from 1982 to 1990. Thereafter, the Department was led by Dennis A. Andrejko, AIA, as Director until 1995 when Dr. Elizabeth Cromley became Chair. With Dr. Cromley's departure at the end of the 1996 calendar year, Dennis A. Andrejko and Beth Tauke were appointed Interim Chair and Interim Associate Chair, respectively. From 1999 to 2004, Kent Kleinman served as Chair. Jean Lamarche served as Acting Chair in 2003-4. From 2004-2010, Mehrdad Hadighi served as Chair and in 2011, Omar Khan was appointed Chair of the Department of Architecture by Dean Robert G. Shibley and University Provost Satish Tripathi.

The School of Architecture and Planning is one of 12 professional schools. While one of the smallest in terms of number of departments (Architecture and Urban Planning), the Department of Architecture itself is relatively large with an enrollment of 314 undergraduate majors, 55 undergraduate minors, and 119 graduate students as of Fall 2013. Significantly, the Department of Architecture is the only graduate architecture program in the State University of New York system and the School is the only unit in the SUNY system to offer the accredited Master of Architecture degree.

The School of Architecture and Planning embraces the concept of a broad and liberal education. It is a concept that prepares students for a rapidly changing future even as it respects traditions of the past. The School's programs, therefore, strive to synthesize a wide range of aesthetic, environmental, social, historical, technological, and methodological concerns. Above all, the School seeks to educate professionals who are responsible, competent, and fully committed to bettering the quality of life for all people and doing so in an ethical manner.

The Department of Architecture strives to develop engaged, innovative and reflective professionals. It recognizes that architectural design includes more than knowledge of technical skills and requires an understanding of the socio-cultural context within which architecture functions, as well as sensitivity to both human and environmental needs. The Department fosters innovation as well as criticality, recognizing that architects must be able to introduce new ideas into society while also respecting and responding to the needs, objectives, and aspirations of those who will be affected by their work.

C. Institutional Synergies and Benefits

The Department of Architecture has played an integral role in four of the UB2020 strategic strengths: Artistic Expression and Performing Arts, Civic Engagement and Public Policy, Information and Computing Technologies, and Health and Wellness Across the Life Span. The Department through its faculty has helped develop the agenda for these strategic strengths and remains involved in their implementation. The work of the research centers, Urban Design Project, IDEA Center and The Center for Architecture and Situated Technologies aligns with the strategic strengths in Civic Engagement and Public Policy, Health and Wellness Across the Life Span and Information and Computing Technologies respectively. This allows the Department to maintain a significant presence in the University's UB2020 plan and provides the University with leadership and direction in these areas.

The School is also one of six decanal units that is part of the university's RENEW Institute, whose research focus is on energy, water and environment. The Department has six faculty members affiliated with the Institute, one of whom was hired to directly contribute to its research. This Institutional Synergy is the result of a concerted multiyear effort by the Department and the School to work with other units as well as contribute to setting research trajectories at the University.

For the Department of Architecture students, being part of a large university provides ready access to an expansive library and computing system as well as a wide range of courses in different departments. Student life is enriched by this setting where interest in other disciplines can be pursued through minors and through extracurricular activities. The School of Architecture and Planning contributes to this environment of interdisciplinarity through its public lecture series and symposia.

D. Department of Architecture Program

The Department of Architecture is committed to the philosophy that architects have a role to play in the aesthetic, social and cultural betterment of society. We contend that a comprehensive design education

that includes aesthetic judgment, social and historical awareness and technical knowledge prepares students to see the full implications of what architecture and urban design do for the built environment. We teach our students that as architects they have a critical role to play in the progress of society by inspiring the social imagination and proposing future forms of habitation that are innovative in their aesthetic and cultural contribution. Their work will condition how we live, work and socialize. They will need to approach the task of design with great skill, vision and confidence knowing that the pressing questions in architecture have yet to find appropriate answers.

The Bachelor of Science in Architecture (BS) program is formulated around a studio based curriculum that emphasizes **learning through making**. The Department boasts one of the largest material shops for an architecture school that includes conventional and digital fabrication tools. Students develop design thinking, visualization and presentation skills that allow them to develop and communicate their ideas in a professional way. We emphasize working directly with materials and media, producing models and prototypes that help them connect the formal basis of architecture with its physical and most importantly social manifestation. In addition, lectures and seminars in the history, theory and technologies of architecture help students understand that architecture is a multi-disciplinary profession that combines knowledge from the humanities, arts and engineering. Graduating students from the B.S. program effectively complete 90% of the NAAB requirements for an accredited architecture program. They can continue on to get degrees in related design professions like product design, industrial design, construction management or move on to a professional degree in architecture.

The NAAB accredited professional Master of Architecture (M.Arch) provides students an opportunity to engage in **research based design enquiry**. The practice of the profession has become increasingly interdisciplinary, requiring architects to be able to work in multi-disciplinary teams. However, professional programs do not do enough to educate students on the role they can play in assembling and guiding such teams to innovative solutions. What is needed is for architects to comprehend the role they can play in curating the networks of expertise required to address the complex problems of designing the built environment. To this end, research as a component of design enquiry in studio exposes students to different expert networks as they address architectural design problems. Our program, built around four Graduate Research Groups (GRGs): *Inclusive Design*, *Ecological Practices*, *Material Culture* and *Situated Technologies*, takes advantage of faculty research and their related expert networks. Students have the opportunity to conduct their studies in one, two or all the GRGs. Each group ties architectural design to research agendas that presently and in the future will influence the design of the built environment. Inclusive Design addresses human factors like disability, age and gender; Ecological Practices explores the influence of environmental factors like energy, biodiversity and sustainability; Material Culture addresses the logic of construction and building assembly through traditional and new materials while Situated Technologies explores ubiquitous digital technologies in the design of responsive architecture and interactive urbanism. The disciplinary networks that these groups engage include public health, anthropology, sociology, gender studies, geography, landscape architecture, urban planning, material science, computer science, robotics, media study, visual arts, engineering and applied sciences.

The Department also offers a degree of Master of Science in Architecture (MS) designed to educate students from architecture as well as other disciplines about **specializations within Architecture and Urban Design**. The program is focused on methods of design enquiry prepares students to be intellectually equipped to do advanced research in their specialization, capable of interdisciplinary work and intellectually equipped to contribute to the development of the discipline. The MS in Architecture provides specializations in the following area: Inclusive Design, Situated Technologies, Built Environment Sustainability, Historic Preservation and Urban Design.

The Department of Architecture takes its role as part of a public research university seriously. Our mission is tied to serving the public and being a forum for public debate. Through our lecture series, fellowships, sponsored chairs, community engagement, research and pedagogy we invite the public to engage our students and faculty to discuss local and global issues as they affect the design of the contemporary and future built environment

1.1.2. Learning Culture and Social Equity

The University at Buffalo with all its constituent units, including the School of Architecture and Planning, is an equal opportunity/affirmative action employer and recruiter and does not discriminate on the basis of race, color, religion, sex, age, national origin, disability, marital or veteran status, or sexual orientation, in accordance with federal and state law. This policy, which appears on the Department's website and on print versions of faculty and student recruitment materials, accurately reflects and guides the Department's actions without exception. In addition, the Department strives to create a learning environment that is supportive of, and worthy of, a public university and the students we teach. The School has developed a Diversity Plan 2012-2015 (see that has laid out a strategy for us to improve our diversity with six goals:

1. Publicly Celebrating Diversity: Develop a public image for the School of Architecture and Planning that conveys a message of diversity
2. Recruitment: Recruit greater numbers of applicants from underrepresented groups into both the faculty and the student body.
3. Student Development: Retain, and graduate greater numbers students from underrepresented groups. Retain and tenure greater numbers of faculty from underrepresented groups.
4. Post Graduate Support: Provide a network of support for SA&P alumni relative to their careers, desire for lifelong learning and engagement, social interactions, and willingness to provide service and/or support to strengthen and advance the School.
5. Promotion and Tenure: Support diversity in faculty and staff hiring, promotion and tenure.
6. Community Engagement: Engage the diverse Buffalo-Niagara community through research, scholarship and service.
7. Information and data gathering: Use evidence-based decision making and evaluation methods to strengthen the diversity initiatives of the school through the systematic collection and organization of data

In all faculty and staff searches, the Department highlights its affirmative action stance and routinely advertises all its positions in the Affirmative Action Register. The gender balance of the tenured, tenure-track faculty is above the national average with 9 females and 15 males. The Office of Equity, Diversity and Inclusion collects national diversity statistics for entry level architecture faculty; our faculty composition generally correlates positively with the national profile.

	Total	Female	Black	Hispanic	Asian	Native American	Unknown
National*	100%	32%	3%	8%	6%	0%	5%
Department	100%	38%	0%	2%	10%	0%	0%

FIGURE 2: NATIONAL AND DEPARTMENTAL FACULTY COMPOSITION¹²

¹² Source: Requested data from the Office of Equity, Diversity and Inclusion, University at Buffalo

In terms of gender and promotion/reappointment, during the 2012-2014 period two female assistant professors were granted tenure. In terms of gender and rank, one of four (25%) Full Professors, five of ten (50%) Associate Professors, and three of ten (30%) Assistant Professors, are women.

In terms of undergraduate students, University at Buffalo Undergraduate Admissions, and not the Department of Architecture, has primary responsibility for recruitment and admissions at the freshmen level, although both the Department and School of Architecture and Planning Undergraduate Academic Services provide supplementary recruitment and admissions programming in conjunction with the Office of Undergraduate Admissions. In addition, an adjunct assistant professor of architecture has been appointed Director of Recruitment effective with 2014-2015 academic year focusing on recruitment, with the Assistant Dean for Undergraduate Education focusing on undergraduate admissions. Both the Director of Recruitment and Assistant Dean for Undergraduate Education report directly to the Associate Dean for Academic Affairs. The School's Assistant Dean for Undergraduate Education works with the Office of Undergraduate Admissions on applicants being considered for admission through the Educational Opportunity Program (EOP); the Academic Challenge and Enrichment Program (ACE); the Akers Scholars program administered by Cora P. Maloney College (CPM); the Collegiate Science, Technology, and Enrichment Program (C-STEP); Student Support Services (a federally-funded TRIO program); and, through Individualized Admissions Consideration (IAC) or Special Talent Admissions. Students in the aforementioned special advisement (EOP, ACE, CPM, SSS, C-STEP) units may receive additional financial supports provisions from the University at Buffalo, the State of New York, and the U.S. Department of Education, as well as intensive academic support services from both the special advisement unit and School of Architecture and Planning Undergraduate Academic Services. Students in these special advisement units, often underprivileged or underrepresented undergraduates, may be eligible for additional time (up to 20%) to complete the B.S. in Architecture degree. The school's associate dean for academic affairs and assistant dean for graduate education oversee diversity initiatives at the direction of the dean of the School of Architecture and Planning and collaborate closely with the department chair.

At the graduate level the Department Chair becomes actively involved in recruiting qualified minority students. The principal vehicle for attracting and retaining minority graduate students is the Schomburg Fellowship program, a competitive scholarship fund that offers support for students in doctoral and master's level programs who can demonstrate that they would contribute to the diversity of the student body, especially those who can demonstrate that they have overcome a disadvantage or other impediment to success in higher education. The Fellowship aims to combine departmental and university resources to provide students full tuition waivers and generous stipend support throughout their study. The Schomburg Fellowship is publicized on both our website and that of The Graduate School. Typically, the chair and the assistant dean for graduate education identify applicants who will contribute to the diversity of the program and shepherd them through the lengthy nomination and application process. Architecture faculty also have a role in helping identify and support potential Schomburg nominees. The department has five Schomburg Fellows enrolled in graduate study in 2013-2014, the most in our history.

Student retention and support remains an important part of our diversity plan. We have implemented a student-led, faculty-supported, peer mentoring program to improve the learning experience for women entering their freshman year of architecture study. The department faculty incorporates non-Western and underrepresented traditions into the Intro to Architecture, Diversity and Design and Architecture History sequence, among others. The faculty takes the time to examine critique practices and evaluate the ways in which critiques and other evaluation processes that might affect students from underrepresented groups

during our monthly faculty meetings. Students have started a NOMAS chapter, launched in the Spring of 2012 that has given minority students clear representation in the Collective Student Government.

Access to existing policies including Studio Culture Policy, Thesis and Special Project Policy, Academic Integrity Policy and Academic Grievance Policy are available on our website at:

For undergraduate students: <http://ap.buffalo.edu/academics/related/online-resources/undergraduate-resources.html>.

And graduate Students- <http://ap.buffalo.edu/academics/related/online-resources/graduate-student-resources.html>.

The policies are revisited and amended during regularly scheduled (monthly) Department and School-wide meetings, which are attended by faculty, staff, and student representatives of the Collective Student Government. Faculty and staff also participate in shaping the School and Department through the agency of standing and ad hoc committees. (Note: faculty, staff, and student employment terms, conditions, and salary schedules are governed by their respective unions: the United University Professors for faculty and professional staff, the Civil Service Employee's Association for secretarial and support staff, and the Graduate Student Association for graduate assistants).

1.1.3. Response to the Five Perspectives:

A. Architectural Education and the Academic Context

The University at Buffalo prides itself on a 150-year tradition of high quality education. The University consists of 12 professional schools and a College of Arts and Sciences, which offer 77 baccalaureate¹³, 205 master's, and 84 doctoral level degrees¹⁴. Twenty-two separate bodies accredit these programs in addition to the overall University accreditation by the Middle States Association of Colleges and Secondary Schools. Under President Satish K. Tripathi and Provost Charles F. Zukoski, the University has focused on developing its role and reputation as a premier research institution, with an emphasis on academic excellence—research and scholarly distinction, transformative student experiences and engaging public service. Its work in education, research/scholarship, community engagement and service is guided by a mission to improve the quality of life for the people of our region and the world at large.

The Department of Architecture through its Master of Architecture degree program is committed to providing a holistic design education and a transformative student experience. Our pedagogy subscribes to the notion that architecture must always be integrated, challenged, problematized, and inspired by forces beyond disciplinary boundaries and that both the undergraduate and graduate curriculum bear witness to this philosophical stance. The State University of New York requires that all undergraduate students complete a set of required and comprehensive general education courses. Our students are thus appropriately exposed to a diverse range of paradigms and disciplines. Our "4+2" program construction exposes students to both discipline-specific and general education courses over their four year undergraduate career. While our research-based graduate program emphasizes that architectural design does not exist in a vacuum and should engage a variety of sociological, technological and cultural issues in order to address the pressing needs of humanity. In addition, the faculty strongly feels that architecture and design education holds many important and empowering lessons for those in non-architecture fields. The Department therefore reaches out to the general University population with introductory undergraduate courses that fulfill various UB/SUNY general education requirements (ARC

¹³ Source: <http://admissions.buffalo.edu/academics/areasofstudy.php>

¹⁴ Source: http://www.buffalo.edu/about_ub/ub_at_a_glance.html

121¹⁵, and ARC 211¹⁶) as well as new introductory survey courses on landscape (ARC 314/END 275) and architectural sketching (ARC 318).

The Department of Architecture has strategically developed important relationships with other departments in order to provide its students with greater variety of educational opportunities, its faculty with interdisciplinary research collaborations, and the institution a committed partner in the mission of the university. We have a strong relationship with the Department of Urban and Regional Planning our sister department in the School. We share selected faculty, cross-list certain urban design courses at both the undergraduate and graduate level, have a dual-degree option, coordinate schedules, and orchestrate joint events and lectures. Select faculty members are also working together on research across the two departments. Architecture also enjoys a strong relationship with the Department of Media Study with whom we share a joint MArch/MFA degree, cross-list courses, share a faculty appointment and engage in inter-disciplinary research. With the School of Management we share a joint MArch/MBA degree option and with the Department of Visual Studies, we cross-list courses and engage in inter-disciplinary research. The Department also enjoys a healthy relationship with the Departments of Industrial Engineering and Rehabilitation Sciences. Departmental faculty have co-taught courses with faculty from the Law School, and the Graduate Program in Evolution, Ecology, and Behavior. Thesis committees have brought together faculty from diverse units such as Media Study, Music, Communications, Computer Science, Engineering, Comparative Literature, and the UB Green Office.

The educational environment is significantly enriched by a number of regular public events hosted by the Department and the School. The School has invested significant effort in its lecture series which, despite limited resources, offers a very respectable roster of 8 to 12 speakers each year.. Past speakers include Thom Mayne, Todd Williams + Billie Tsien and Steven Holl. The Clarkson Chair is the Department's principal endowed visiting position and brings a distinguished individual to the School for several days to engage faculty and students in structured and unstructured discussions. Its roster includes two Pritzker Prize winners (Peter Zumthor and Glenn Murcutt) and a number of significant architectural theorists, historians and practitioners. The School also hosts an annual open house/exhibition "Atelier" which allows students to share their work with their peers and the public at large. The Department offers two fellowships, the Peter Reyner Banham and the Magda and John McHale fellowships that allow two fellows to be in residence for either one semester or a full year. This brings new energy to the Department every year and gives students access to unique architectural thinkers. The fellows also present their research in a public forum through a lecture or symposium and exhibition. A book featuring 2015-2010 Banham Fellows' research was published by Oro Press in 2011. Lastly, the Department has elevated both the number and range of guest critics for studio reviews, and has restructured the final thesis review into a pedagogical and public event, appropriately celebrating the final projects of our graduate students. The Department leadership has made a conscientious effort to publicize all events and reviews to alert the University community, the profession, and the public of the Department's activities.

B. Architectural Education and the Students

The architecture studio plays a significant role in our MArch curriculum and in the educational experience of our students. Through it we are able to synthesize different forms of knowledge, engage our community

¹⁵ Fulfills the SUNY Fine Arts General Education requirement

¹⁶ Fulfills the SUNY American Pluralism General Education requirement

and context, and speculate on how lessons learned here can apply to the future of the built and natural environment. With the expansion of studio space into Parker Hall in 1999, the Department now offers each student a dedicated workspace for every studio including freshman. Students are encouraged to make the studio their intellectual and logistical home. Studio life and culture develops camaraderie, an ability to work collaboratively and lifelong friendships. It provides a singular learning experience unique to the Department of Architecture.

The studio also provides students with extended face time with faculty, something sorely missing in other disciplines. This allows for mentorship throughout their education. We are conscientious about providing different types of mentors as the student advances through the curriculum. Our freshman studios are coordinated by three faculty members one of who is a tenured, tenure track or clinical faculty (full time), and staffed with 8 teaching assistants (graduate students). Sophomore studios are coordinated by tenured, tenure track or clinical faculty with some sections taught by adjunct faculty. It is our intent that there is consistency and sustained leadership over a number of years in each year such that learning objectives can be maintained and verified. In the Junior and Senior studios, instructors are frequently either full-time faculty members and/or licensed practitioners. At this stage of their education it is important that they have access to professional architects who can mentor them about the architectural profession. The fall senior studio is the capstone of the undergraduate studio sequence. It engages the students in the design of urban housing. Students are pushed to consider all factors of design, including socio-cultural factors that arise in the consideration of housing. In the senior spring semester, students take a studio that focuses on developing a project for an architectural design competition. Seniors are also eligible for the Department's semester abroad offerings in Barcelona, Costa Rica or Aarhus, Denmark where they can satisfy one of the studio requirements.

The graduate accredited program consists of two tracks: the 2-year track for those with undergraduate bachelor degrees in architecture and the 3.5-year track for students with non-architecture undergraduate bachelor degrees. Graduate students ballot for their studios which have an average faculty/student ratio of approximately 1/12. Students in the 2-year track and those in their final year and a half in the 3.5-year track are able to take research based studios in four designated areas of concentration: *inclusive design*, *material culture*, *ecological practices*, and *situated technologies*, as well as graduate studios focused on selected topics such as urban design. This gives students access to faculty research and scholarship which includes creative work and sponsored research. In addition, an advanced research-based master of science in architecture (MS Arch) provides students the opportunity to engage in advanced research in inclusive design, situated technologies, building science and sustainability, historic preservation and urban design.

The character of the University and the School as a research-intensive institution pervades the Department. Consequently, students are encouraged to see themselves as both the consumers and producers of knowledge. Advanced students have many opportunities to work side-by-side with faculty on projects ranging from design competitions to interior and building design to the design of regional master plans. The Center for Inclusive Design and Environmental Access (IDEA), the Urban Design Project (UDP), and the Center for Architecture and Situated Technologies (CAST) are the Department's three principal centers for sponsored work where many future architecture researchers will continue to receive their initial training and mentoring as research assistants. A similar mentorship relationship exists between our teaching assistants and their faculty supervisors, particularly for the freshman studio assistants. Increasingly, students interested in a teaching career have come to value the opportunity to experience academic life from the perspective of the educator. The Department recognizes that the fine work of the freshman studios and other courses would not be possible without the dedication and excellence of our

student teachers. It is no coincidence that several of our recent graduates have gone on to teaching positions at other institutions shortly after graduation.

The Department and School are home to five student organizations: the American Institute of Architecture Students (AIAS), the Graduate Student Organization (GSA), the National Organization for Minority Architecture Students (NOMAS), Alpha Rho Chi (APX) and the Collective Student Government (CSG) representing both Planning and Architecture students. In the past, the AIAS applied for and received a grant to initiate a Freedom by Design (FBD) chapter from the national AIAS organization. Several projects have been completed providing accessibility modifications to homes of people with disabilities. The AIAS receives space and support to advance their mission on behalf of the profession and was rewarded for its efforts in 2007 with the receipt of the national award to the President of our Chapter. They hosted in spring 2011 the Northeast Quad Conference. The current AIAS board and members are developing an Accessibility 'tour' of a local building, the Buffalo Historical Society, and are actively helping organize professional events (such as Portfolio workshops and BIM workshops) and social events (such as Beaux Arts Ball). NOMAS was established in 2012 and has over that last two years has organized the film screening of "Archiculture", two architecture competitions: one based in Tokyo, Japan (ARCHMedium in which the team received an honorable mention) and another based in Spain (Open Gap M.ART), bike tours of the Buffalo's Outer Harbor, architectural firm tours of Cannon Design, Architectural Resources, Flynn Battaglia, Kideney Architects, Watts Architecture & Engineering, assisted in planning Atelier Week 2013 and 2014 and attended the Annual Conference of the National Organization of Minority Architects in Detroit, MI in 2012. Alpha Rho Chi engages the student body in social activities including bowling, ice skating and film series and philanthropic activities like raising money for Relay for Life (raised \$1424) and worked with not-for-profits like Buffalo Reuse, Roswell Park cancer Institute, the Foundary and Buffalo Niagara Riverkeepers. The GSA is particularly relevant for architecture students since the Department offers both opportunities and confers responsibility on those graduate students who serve as teaching assistants. The CSG works directly with the School's decanal staff; representatives of the Collective attend faculty meetings, host fund raising events, and are principally responsible for the annual open house "Atelier." Both the AIAS and GSA host a lecture on the School of Architecture and Planning Lecture Series each year.

The Department takes particular pride in the success of our students in juried competitions, academic conferences and exhibitions. The Department also recognizes that our graduates must practice in an increasingly global intellectual and economic context. Students must feel confident and empowered to contribute to the field at the national and international level and to learn from relevant developments wherever they may occur. In this respect, there is no substitute for direct exposure. Our student body and faculty are international in composition and diverse in terms of gender and ethnicity. The Department also has a respectable record of attracting international Fulbright Student Scholars to the graduate program and exchange students from Denmark, Germany and Brazil attend the program each year. Seniors and graduate students are provided with opportunities to study in novel cultural settings including Ireland, Japan, China, Holland, France, Denmark, Spain, Belgium, Italy and Costa Rica. Recent visitors have come from Scotland, Australia, England, Canada, Denmark, Finland and Germany.

Finally the Department recognizes that architecture education represents a financial hardship for many qualified and talented students. Financial assistance and other opportunities for income remain a priority for many students despite the very good value of graduate education at the University at Buffalo. Each year, the Department allots approximately \$110,000 worth of tuition waivers to qualified graduate students to help defray the cost of tuition. In addition, the Cannon Graduate Scholarship, established in 2000, covers the full cost of tuition for two graduate students and includes a paid summer internship at the firm's

national headquarters in Grand Island, New York. (It should be noted that Cannon Design has been an active member of the AIA's Large Firm Roundtable.) The Department has also established two more scholarship/ internships with the Watts Undergraduate Minority Scholarship and the Kideney Scholarship. The department nominates incoming students who will contribute to the diversity of their program for Schomburg Fellowships, which are offered by UB's Graduate School. These prestigious fellowships provide full tuition scholarships and a generous stipend. In 2014-15, the department will have five Schomburg Fellows with funding to support their graduate study.

The Department and the School also honors student achievement with a number of awards and fellowships including the Pella Award (\$3000 awarded to winners of an in-house design competition), various privately funded scholarships in the \$1-3,000 range, the Brunkow Fellowship (full tuition scholarship plus a substantial stipend for editing and publishing the School of Architecture and Planning journal, *Intersight*), and academic performance scholarship and design awards.

C. Architectural Education and Registration

The Department of Architecture offers several venues for informing and preparing students for the transition to professional life including registration and licensure. The primary curricular vehicle for this material is the course Professional Practice (ARC 582) required of all Masters of Architecture students. Through this course, and other opportunities, students receive a consistent, critical, and comprehensive exposure to a range of professional practice issues, including licensure and registration. The instructor, Clinical Professor Ken MacKay, is an experienced, licensed architect, and past president of the Buffalo/Western New York Chapter of the American Institute of Architects. In 2013 the chapter awarded Mr. MacKay the 'Mentor of the Year Award'. He recently returned to the chapter's board to begin a three year term to act as a liaison between the school and the local profession. Mackay also serves as the School's IDP Coordinator and works with the Department to hold an annual IDP event. He is uniquely positioned to coach students on the transition from academia to practice, on the rights, conditions, and obligations that attend professional life and on the internship development program requirements.

The local AIA and the AIAS offer relevant information on a regular basis. A subgroup within the local AIA, the Buffalo Emerging Professionals (BEP), offers programming and resources to students and young professionals, including registration exam study groups, mentoring sessions, portfolio review sessions, and networking events. Anne Dafchik, currently teaching in the Junior Year Studio, has organized events to educate students and emerging professionals on the path to licensure. In addition, many full-time and part-time faculty are engaged in practice to varying degrees. These faculty serve regularly as mentors to students on matters related to professional conduct and the requirements for practice. In addition, the Departmental website contains a link on its homepage to the NAAB site. Students are informed about and encouraged to examine the student performance criteria on the NAAB website. As required, the appropriate NAAB text related to accreditation and registration is included in the Department's print version of the graduate catalog.

Lastly, it should be noted that in establishing the Cannon Design Graduate Scholarship program in 2000, the Department negotiated a mandatory summer internship component with the firm to signal the importance of this experience, and to build a bridge between academia and practice for incoming and current graduate students. The Department has also added similar scholarship/internship programs with the Watts Undergraduate Minority Scholarship and the Kideney scholarship. The department nominates incoming students who will contribute to the diversity of their program for Schomburg Fellowships, which are offered by UB's Graduate School. These prestigious fellowships provide full tuition scholarships and

a generous stipend. All applicants to the graduate program are considered for scholarships, fellowships, and assistantships.

D. Architectural Education and the Profession

The Department believes that we are educating students in the values and standards of the profession and equipping them to assume positions as responsible and informed leaders in their communities. While the profession sets many key parameters for a professional education, it is also the case that many new tools, techniques, and values for professional practice are emerging from the academy. Thus we are faced with the challenge of preparing students to master current standards of practice while empowering them to responsibly influence their future. To fulfill this double agenda requires proper historical grounding, technical competency, familiarity with regulatory rules and agencies, and a philosophical/critical disposition that respects existing values but also is open to challenging them. This is an ambitious task, and traces of this double agenda are laced throughout the educational program matrix.

As early as the first year, students are introduced to the complexities of diverse client compositions and the evaluative criteria for judging the built environment (ARC 121, 122 and 211). This issue, namely developing sensitivity to the myriad voices of both the empowered and the disenfranchised, the present and the future, the vocal and the silent, emerges in a number of instances throughout the curriculum but most explicitly in the senior and graduate level design studios where students work with actual stakeholders and constituencies in sponsored or research studios.

A historical understanding of the rise of the professional begins in the history sequence (ARC 231/531 and 234/534). The students are introduced to the evolution of the architect as an enlightened humanist in contradistinction to a craftsman, a genealogy that finds contemporary expression in the legally distinct roles for the architect and the builder. These roles are covered explicitly, and critically, in Professional Practice (ARC 482/582), but also in a number of design studios and seminars that explore the potential and liabilities of design-build practices in which the outcome is a product situated in the community.

Beginning in 2000, the Department has offered several “design-build” courses in which students engage real-world contexts and see projects through all phases including programming, code review, schematics, design development, budget, community meetings, planning board review, and fabrication. This is a logical extension of the Department’s longstanding commitment to community engagement, including 18 years of involvement with Habitat for Humanity (ARC486/568) each summer. In 2013, a project the “Front Yard” resulting from the Small Built Works studio conducted by Brad Wales, designed by undergraduate student Isabella Brito and developed by Wales and Brito in collaboration with artist Brian Milbrand, was built in front of the Burchfield Penney Art Museum. The Department has also more recently initiated significant design-build relationships with several local materials and construction industries. In collaboration with Rigidized Metals, a local textured metals manufacturer, professors Joyce Hwang, Martha Bohm, and Chris Romano coordinated the Hive City Habitat Competition for students to design a structure to house a colony of bees. This competition resulted in the sponsored construction of the winning proposal, “Elevator B.” In collaboration with Boston Valley Terra Cotta, a local manufacturer of terra cotta building components, professor Jean LaMarche conducted a graduate studio. Additionally, graduate student Peter Schmidt developed a thesis project in collaboration with Boston Valley, proposing specific tactics to retool the terra cotta manufacturing process. Also noteworthy in this respect are projects that the School has done for itself including a lecture hall (Crosby 301), a library reception desk and Visual Resource Center. All projects were developed by faculty and students working collaboratively with the University Facilities architectural staff. Students conducted code, material, budget, and fabrication research and constructed sub-components using the School’s shop under the guidance of a master

carpenter. This year students will be building the Grow House, the Department's entry into the 2015 Solar Decathlon. The house is the result of 4 graduate studios and multiple seminars.

Three additional areas deserve mention in terms of developing a knowledge base and value set that will empower our students to contribute constructively to the evolution of professional practice. First, universal design – the notion that the environment should be configured to serve the largest possible population of users – is a growing concern in both culturally and legally. The Department, through the IDEA Center's national standing as the U. S. Department of Education's Rehabilitation Engineering Research Center on Universal Design and the Built Environment, considers itself well ahead of the national curve in terms of developing universal design standards and values. This material is communicated to students in a number of courses, most explicitly and comprehensively in Introduction to Inclusive Design (ARC 463/563), the non-required, but popular, course, and American Design and Diversity (ARC 211), and other offerings under the Inclusive Design area of concentration. The Department's commitment to human factors in the determination of design solutions is further demonstrated by the graduate course offerings the Graduate Research Group in Inclusive Design provides.

Second, command of sustainable design principles, products, and technologies is increasingly expected of architects and the Department has a strong commitment to preparing students to assume leadership roles in advancing this area as future professionals. Sustainability is covered in our required Introduction to Building Technology course. In addition, each year a graduate studio and a range of courses are offered through the Graduate Research Group in Ecological Practices in this area (Prof. Garofalo, Prof. Hwang, Prof. Bohm, Prof. Burkholder, Prof. Wales, Prof. Bassett, Prof. Rajkovich). Professors Bohm, Wales, Rajkovich and Mackay are currently directing the development of the Department's entry in the 2015 Solar Decathlon, which is a significant constellation of efforts that include graduate design studios, technical methods seminars open to all department students and summer internships for students.

Lastly, digital technology is transforming the conceptualization, development and delivery of professional products and services. The School has invested significantly in equipment and personnel to ensure that our students are equipped to handle digital applications in the workplace. The Department has an expanding digital fabrication workshop whose use is well integrated into the design curriculum. It has an experienced digital fabrication staff, and several faculty members and students who are actively conducting research with local fabrication industries. It also has a tenured faculty member who teaches in both the Media Study Department and Architecture. With his addition, Architecture and Media Study have been able to strengthen our dual degree program. However, it is the academy's responsibility to explore new technologies and their concomitant expression beyond current practice. To this end the Graduate Research Group in Situated Technologies offers studios and courses that explore the potential of pervasive computing and media technologies for Architecture and Urban Design. The Center for Architecture and Situated Technologies is a nationally and internationally recognized leader in this area.

E. Architectural Education and the Public Good

The School of Architecture and Planning has a historical commitment to serving local and regional communities. We have used Buffalo and the region, as a laboratory to explore environmental, political and social issues as they pertain to the design of the built environment. Our location within the Great Lakes ecology, our status as a border city and transnational region and our historic architectural legacy (Olmstead, Richardson, Sullivan, Wright, Eliel and Eero Saarinen, Albert Kahn and the Grain Elevators) have all played a significant role in the choices of our design studios and seminars. In addition, a great number of local and regional projects that concern the built and natural environment have profited directly from the contributions of architecture faculty and students.

Undergraduate and graduate studios have utilized local and regional sites and in some cases partnered with community organizations to provide students the opportunity to consider, in addition to formal factors, the socio-cultural conditions of their context (see Spring studios Freshman, Sophomore and Junior and graduate studios Prof. Rafailidis, Prof. Hata, Prof. Smith, Prof. Burkholder). This is an important part of the Department's pedagogy to provide real feedback between students and the public on the value of their work. We encourage this and are happy to see that independent work like student theses and special projects have embraced this kind of work. Courses that introduce theories and methods for determining multiple stakeholder needs are Introduction to Inclusive Design (ARC 463/563), American Design and Diversity (ARC 211, which also fulfills the SUNY American Pluralism general education requirement), focus a large part of their pedagogical content on social issues.

Both within and beyond formally required coursework, the Department offers many opportunities for students to participate in advancing the public good through service learning. Our research centers, Urban Design Project, IDEA Center and Center for Architecture and Situated Technology all provide opportunities for select students to engage different issues concerning the public.

On a regional scale, the University at Buffalo Regional Institute/Urban Design Project, directed by Dean Robert Shibley, is a pivotal force in assisting the city and regional governments develop responsible, responsive and imaginative plans for growth and development. The UBRI/UDP faculty, staff and students are involved in seminal work such as the downtown master plan and visioning process, the Buffalo-Niagara frontier development process, and the Buffalo waterfront development planning process. This work provides an opportunity to understand the complex web of forces and processes that shape neighborhoods, cities, and regions.

The IDEA Center, directed by Prof. Ed Steinfeld, provides select faculty and students the opportunity to engage in sponsored research and community service projects. The Center is a nationally recognized leader in Inclusive Design and its mission is to produce knowledge and tools that will increase social participation of groups like people with disabilities and the older generation, who have been marginalized by traditional design practices. The Center provides a local service for home modifications and is also partnering with a local builder to produce model homes. They also do post-occupancy evaluations.

The Center for Architecture and Situated Technologies, co-directed by Profs. Omar Khan and Mark Shepard, provides select faculty and students opportunities to engage in applied research on pervasive computing and media technologies within architecture and urbanism. The Center is a think tank for this area of research and has produced symposia, publications, exhibitions and projects that focus on the social impact of these technologies. Students working with the center have received juried invitations from international festival and conferences.

Several Department faculty and students are deeply involved in the restoration of Buffalo's principal architectural landmarks, the Martin House Complex by Frank Lloyd Wright, and the Richardson Olmstead Complex by H. H. Richardson. Professor Carter is an active board member of the Martin House Restoration Corporation and the Richardson Architecture Center Board.

1.1.4. Long-Range Planning:

The School of Architecture and Planning has framed a mission and vision that lays out a five year plan. It is summarized as follows:

Mission

Our core mission is to provide quality pre-professional and professional education in environmental design, architecture, and urban as well as regional planning. Responsible professional education in a major public research university requires us to conduct research relevant to education and to the improvement of society and our culture. True to our history, our mission also requires us to be fully engaged both locally and globally in ways that are relevant to the advancement of planning and architecture--cultural productions that engage the pressing social, economic, and environmental needs of the planet.

Vision

The five-year vision is to see the school advance in the ranks of American Association of University public schools of architecture and planning. The vision embodies providing high-quality public education in planning and architectural design with a dedication to diversity in student body, faculty, and staff, as well as the range of public engagements, research projects, and creative practices. We will build on our history of interdisciplinary collaboration across the intellectual traditions of our two primary professions. We will advance knowledge, promote innovation, and establish the conditions for architects and planners to contribute to the making of more equitable, just, sustainable, and well-designed environments.

Toward that end, we will fully develop new curricular opportunities at the doctoral, masters, and certificate levels, which will enable us to be more selective of the applicants to our undergraduate and professional graduate programs. We will also advance the research and creative work of both faculty and students and engage locally and globally through planning and design proposal making, including full-scale, in situ, and virtual testing, and in the continuous improvements of our study-abroad programs. We will work across the disciplines in the university, and with the professions that seek to establish the environmental and social conditions that enable people to live life fully and well. Finally, we will enhance our reputation among planning and design professionals and the institutions that employ them facilitating the placement of our students as interns and our graduates as employees in the professions.

The Department has set strategic goals that complement those set in the School's five year plan These are:

1. To achieve distinction as an accredited professional architecture program that provides a comprehensive design education; one that combines *learning through making* and *research based design* enquiry.
2. To nurture scholarship, research and creative activity in the faculty and students.
3. To build a trans-disciplinary research and pedagogical framework for the graduate programs (MArch and MS) by supporting the work of faculty and students through the Graduate Research Groups.
4. To develop strategic alliances with industry and professional practice to expand research and employment opportunities.
5. To develop a strong international reputation by developing strategic connections with international institutions and attracting students from around the world.

Below are initiatives and accomplishments to achieve these goals over 2012-2014:

- 1) (2012-13) Thoroughly revised admissions procedures to identify incoming student's learning deficiencies and place them within the program such that NAAB performance criteria are all properly covered. This was a deficiency noted by the accreditation visit in Spring 2012 and now has been addressed. The BS and the MArch 3.5yr programs' studio curriculum has been

reworked to better address our curricular goals of providing a complete design education, from the basics to the design of complex buildings. In addition a more comprehensive media curriculum has been initiated to provide students the professional skills in visualizing, representing and communicating their designs.

(2013-14) To better address the variety of skillsets in our incoming 2-Yr MArch program, guarantee that all graduating students have covered the NAAB student performance criteria two tracks have been created one with a comprehensive design focus and the other our research focus. This has allowed us to better place students in studios and courses that guarantee that all students leave with a comprehensive design education.

- 2) (2012-13) Junior Faculty support has been institutionalized with a Dean junior faculty fund that provides tenure-track faculty with financial support to pursue their research. In addition, the Department has initiated a student assistantship program (2013-2014) that provides junior faculty with research assistants and architecture students with faculty mentors. This has yielded greater productivity from the faculty while providing exceptional students with professional guidance.
(2013-14) The Department's Tenure Standards and Procedures were revised them up to date clarifying research, teaching and service responsibilities as well as faculty mentoring and process for going up for tenure. This policy improvement addresses our strategic goal to nurture scholarship, research, creative activity, teaching and service in our faculty. With four new hires this year and three from the previous year clarity on the standards by which their work will be judged is essential.
- 3) (2012-13) Three faculty searches yielded new assistant professors in Integrated Design, Digital Design and Fabrication and Landscape Architecture. These additions will contribute to addressing teaching deficiencies in comprehensive design (highlighted in the 2012 VTR), new technologies and site planning. The three faculty will also build our research capacity by contributing to the Graduate Research Groups.
(2013-14) Three faculty searches yielded four new assistant professors in Integrated Design with a focus on Energy, Urban Design and Architectural Design. These will build our capacity in core courses like Building Technology, Comprehensive Design and graduate studio teaching. Two hires in Urban Design will fortify our course MS in Historic Preservation and Urban Design while our hire in Integrated Design will directly contribute to research associated with the RENEW Institute.
- 4) (2012-13) Strategic alliances with two local manufacturers of building products; Boston Valley Terra Cotta and Rigidized metals has yielded opportunities for faculty research, economic development and student employment. The Department is exploring ways to expand this to include architectural practices and foundations.
(2013-14) AIA Western New York has renewed sponsorship of the annual Louise Bethune Lecture. Billie Tsien of Todd Willaims Billie Tsien Architects was the 2013 speaker. They have also committed to increased participation in our AIAS chapter, including subsidizing membership and providing networking opportunities.
- 5) (2012-13) The Department hosted an international conference titled MediaCities that builds on our relationship with the Bauhaus Universitat Weimar, with whom we share a dual MS degree program and a student exchange. In addition, we are exploring student exchange programs with University College Dublin and University of Limerick. These initiatives are a means to expose the work of the Department, its faculty and students to equivalent international educational institutions.
(2013-14) The Department ran four summer abroad courses in Barcelona, the Netherlands, Japan and Costa Rica.

A. Enrollment

The criteria by which we measure the health of our undergraduate and graduate enrollment include: a) students' past performance (GPA and standardized tests), b) future promise (design assignment and portfolio review), c) diversity (gender, ethnicity and international), and d) aligning populations with our teaching resources. We have been tracking each of these criteria and continue to be successful in attracting high quality students (a) that excel in both the undergraduate and graduate program (b). We have also aligned our enrollment numbers with our teaching resources (d) such that teacher/student ratios in the undergraduate program are 1/15 and the graduate 1/12 ensuring adequate face time and mentoring. What we foresee as still requiring work is diversity. We are working on expanding our diversity in the graduate program which has seen steady interest from international students but can expand on attracting more women and minority students (See I.1.2). Our focus in the coming years will be to increase gender and ethnic diversity across the program. In addition, we would like to increase the quality and quantity of students in our 3.5 year professional track by increasing applications.

B. Facilities

The Departmental facilities are undergoing major renovations commencing in 2011 and continuing in phases into 2016. We are fortunate to occupy two historic buildings as well as a utilitarian building that houses our phenomenal materials workshop and freshmen studios on the University's South campus. They provide us with a prominent location, adequate space, significant identity and are a remarkable strategic asset. The administrative building (Hayes Hall) began renovations in 2011. The renovation provides new square footage that will be converted into a large lecture hall, studio facilities and exhibition gallery. The studio building (Crosby Hall) will be renovated in stages, commencing in spring 2015 when the basement is reconfigured for freshmen studios, a new and much larger elevator is added, and all lavatories are renovated to be ADA compliant with the latest standards. A second phase of work, contingent on state funding, is expected to occur in the next few years, and will include renovations to address infrastructure replacements and the removal of interior partitions to create large open studios. Through a school wide design charrette faculty and students were able to communicate to the architects their concerns and how the building can contribute to the department's pedagogy. One important intention of this renovation is to bring all studios across the program under one roof. These improvements in the facilities will provide both students and faculty with the infrastructure necessary for advanced and prolific research, and to remain competitive with peer institutions.

Improving our computing infrastructure remains a priority for the Department. Through the Hayes Hall renovation project, we are significantly increasing wireless capacity throughout the building, adding state-of-the-art digital presentation capabilities in all classrooms, studios, labs and meeting spaces, adding dual-image digital presentation capacity to our gallery, increasing the size of our main computing lab, and expanding the print/plot capabilities throughout the building. We have also continuing improvements in the Digital Workshop by merging it with our Materials and Methods Shop in Parker, and by adding additional capacities, including a student-fabricated 5 ax CNC machine, and several smaller 3D printers. The Department has made its fabrication capabilities- the Materials Workshop and the Digital Workshop- a cornerstone of its pedagogy and research. In the coming years we hope to build on this through cross-university collaborations and research and creative activity opportunities for faculty and students.

C. Faculty

Supporting the research and creative activity of the faculty is a prime responsibility of the Department and School and central to our mission. Strategically, we have attempted to align faculty research with our four graduate curricular areas of concentration: Inclusive Design, Material Culture, Ecological Practices, and Situated Technologies. This has helped faculty organize and pursue internal and external sources to

support their work. In addition, it has allowed students, primarily graduate, to engage with faculty research in studios and seminars as well as sponsored research.

Since the last accreditation visit we have made a concerted effort to better support our student population with increased teaching resources. We have added seven new tenure-track faculty- two in Integrated Design, two in Urban Design, one in Landscape Architecture, one in Materials and Fabrication and one in Architectural Design, plus two clinical (full-time) faculty. This has brought our roster to 30 full-time and 14 part-time faculty in 2014.

In terms of adjunct faculty, the Department engages about 7 clinical (full-time) and 15 visiting faculty each semester. This is the case in Fall 2014. Adjunct faculty are a huge asset when staffed with an appropriate mix of junior and senior talent drawn from national and international pools. The Department views these positions as opportunities to expose students to the most advanced thinking and making in the discipline and profession, to supplement the expertise of the tenure/tenure track faculty, to introduce the faculty and their work to peers beyond the local area, and generally to connect the Department with peer Departments and individuals across regional and national boundaries. Visiting studio faculty, visiting distinguished critics, and lecturers also add significantly to the broadening of our students' horizons. Leveraging the adjunct positions to advance the mission objectives has become, and remains, a priority of the Department. The Banham and McHale teaching/research Fellowship Program (1999-present) is one of the most visible vehicles for realizing this aspiration.

D. Curriculum

As a statement of our values and a description of our capabilities, the curriculum is an important factor in recruiting excellent students and educating future architects. It is also a means for integrating our research with our teaching missions. In 1997 the faculty grouped their fields of expertise and scholarly activity into four clusters: urban design; universal design; design/theory, and sustainable design/landscape (formerly: environment/landscape). These "Areas of Concentration" gained visibility and became vital program nodes around which we continued to build student learning and faculty development until 2007 at which time the Department Faculty modified and elevated the Areas to Graduate Research Groups (GRGs) in the MArch Program. The recent GRGs (Inclusive Design; Material Culture; Ecological Practices; and Situated Technologies) make it possible for students and faculty to work more closely together on research in these four areas.

Although not part of our accredited core program, the 1.5 year Master of Science in Architecture (MS) program is potentially a powerful vehicle for enhancing our graduate student profile. We have plans in place to set up certificate programs in areas of specializations such as Inclusive Design, Historic Preservation, Digital and Information Technologies and Sustainability. The Department as a whole, including the accredited program, profits from the advanced teaching and learning that a vibrant post-professional cohort can bring.

E. Student Empowerment

Student Empowerment is tied to two criteria: 1) establishing strong student participation in the Department's mission and 2) providing students with resources to support the expenses of their education. Through support and encouragement of the student organizations, AIAS, GSA, NOMAS, APX and CSG we are fostering an environment where students can contribute to the Department's mission. Student organizations play a role in the School lecture series as well as organize the Atelier annual event. In addition, there is student representation on all faculty searches where they are able to provide an exclusive recommendation report for the Chair's and Dean's consideration. Self-initiated student projects

(competitions and installations) and theses that require space and funding are encouraged and supported on a case by case basis. Students are motivated to be entrepreneurial and the Department assist them by connecting them to sponsors as well as leveraging our status in eth city and region. Although the University at Buffalo is a remarkable educational value, generous student support is not optional in today's marketplace for top quality graduate students. Since the 2012 accreditation visit the Department has increased our financial assistance to students through tuition scholarships (\$40K increase from base), sponsored scholarships (Cannon Scholarship, Dean's Scholarship, Skerker's Scholarship, the Friends of SA&P scholarship, the Alumni Scholarship, the Kideney Scholarship and the Brunkow Fellowship). and teaching assistantships. With our growing research capacity, students are also able to intern with faculty and get paid during the school year.

F. External Communications

Since the 2012 Accreditation Visit, a strategic priority for the Department and the School has been to enhance our external communications to attract the finest students, celebrate and disseminate faculty and student accomplishments, connect with alumni and the profession. The Department in collaboration with School has made considerable strides in reconsidering its brand and developing a plan to redesign and properly disseminate its printed and digital communications. The School recently launched a newly designed website, which is a key component in its rebranding. Additionally, the School and Departments are leveraging social networking media to better communicate with our students and alumni.

1.1.5. Program Self-Assessment

The Department performs self-assessment on its curriculum and faculty on an annual basis. The curricular self-assessment is done by faculty through an end of year exhibition and meetings to review the work and assess ways to improve teaching and curricular offerings. These meeting are recorded in minutes with the Chair following up with faculty to implement the recommendations (documentation will be provided in the team room). It is done by the students through an online survey that queries how well the NAAB SPC's are covered by the courses. Assessment of faculty teaching is done through a university conducted student course evaluation. An online version is to be rolled out in Fall 2014 which will improve its usefulness to inform the Department Chair and the faculty member on teaching.

The Department also performs periodic self-assessments of the Department Mission Statement, Department Multi-year Goals, and the NAAB Five Perspectives with a group of faculty, alumni and students. They are scheduled to be performed in Sept 2014 and their results will be available in the visiting team room.

A. Online Student Curriculum Self-Assessment:

Online surveys are given to 2-year graduates, 3.5-year 2nd year graduates, 3.5-year 1st year graduates, and fourth, third, second, and first-year undergraduates to evaluate their learning and hence our teaching of their courses. Students were asked questions based on the NAAB student performance criteria assigned for their courses that year.. Results are as follows:

1. Graduate Students: Graduate Students indicate that they either "strongly agree" or "somewhat agree" that they have developed knowledge and skills related to all the criteria. Exceptions are questions 21 (building costs),
2. 3.5-Year Graduate 2nd Year Students: Three-and-a-half-year second year students indicate that they either "strongly agree" or "somewhat agree" that they have developed knowledge and skills related to most of the criteria. Exceptions include questions 3 (technical drawing/specifications), 9 (conserve/reuse), 17 (structural systems), 31 (building cost), and 38 (professional practice).

3. 3.5-Year Graduate 1st Year Students: Three-and-a-half-year first year students were generally either “strongly agree” or “somewhat agree” that they have developed knowledge and skills related to most of the criteria. Exception includes questions 17 (Architectural History), which has 25% disagreeing.
4. Fourth Year Undergraduate Students: Fourth year students indicate that they either “strongly agree” or “somewhat agree” that they have developed knowledge and skills related to all the criteria.
5. Third Year Undergraduate Students: Third year students indicate that they either “strongly agree” or “somewhat agree” that they have developed knowledge and skills related to most of the criteria. The exceptions are questions 9 (conserve/reuse), 14 (divergent canons), 22 (structures).
6. Second Year Undergraduate Students: Second year students indicate that they either “strongly agree” or “somewhat agree” that they have developed a knowledge and skills related to all the criteria.
7. First Year Undergraduate Students: First year students indicate that they either “strongly agree” or “somewhat agree” that they have developed knowledge and skills related to all the criteria.

1.2. Resources

1.2.1. Human Resources & Human Resource Development

The Department of Architecture is composed of a remarkable cohort of dedicated students, staff, faculty, clinical and adjunct instructors and administrators. Each, according to their respective charge and talents, contribute to the life and excellence of the Department. This is a Department whose aspirations and standards are high because of the caliber of individuals who work and learn here.

A. Students

Students are our *raison d'être*. In the undergraduate, pre-professional program, we exist to educate, mentor, inspire and prepare students for future professional training and, no less significantly, for a full life as engaged, informed and concerned world citizens. The Department does not actively recruit its freshman students; this large task is the responsibility of the Office of Undergraduate Admissions, with the Department of Architecture assisting with secondary admissions efforts. 87% of matriculating freshmen come from the State of New York, with improved SAT scores from 1163.8 in Fall 2007 to 1168.2 in Fall 2014.

University at Buffalo Undergraduate Admissions has made a concerted effort over the past years to raise the academic quality of the accepted freshman. For example, University at Buffalo Undergraduate Admissions has reduced admissions offers from 75% of all freshman applicants in Fall 2000 to 51.7% in Fall 2007, and 51% in Fall 2010, and in Fall 2014, 46% of all freshmen applicants were extended offers of admission. The Department sets a cap for the size of the undergraduate pre-professional Bachelor of Science in Architecture and is negotiated by the School of Architecture and Planning directly with the Office of the Provost. Once an admitted architecture major, a student is subject to the Department's academic standards and is expected to conduct him/herself in a manner befitting a future professional. The student is treated likewise.

All Department of Architecture students are required to complete a portfolio of studio work at the end of each semester in order to proceed to the next studio sequence. The portfolio requirement, instituted in 2000 and expanded in 2005, is intended to signal the importance of recording one's design work in a professional and practical format. Freshman students receive training during the first year on methods, techniques, and standards for assembling a portfolio. A seminar offered to seniors examines portfolios in

detail. There is anticipated attrition throughout the first year. The average number of students entering the sophomore year is about 80. There is some additional attrition after the second year but little beyond that point. The vast majority of students will migrate to the Bachelor of Arts in Environmental Design, offered by the Department of Urban Planning, if they have completed at least one year in the Architecture BS. If they have completed only one semester, they will migrate to any possible major at UB. In fall 2009, out of 92.5 Environmental Design majors, 50 originally started as Architecture majors.

There is a natural tendency for many students to migrate to Environmental Design during their freshmen or sophomore years since the Bachelor of Arts in Environmental Design, offered by the Department of Urban Planning, is a six-semester major and first year architecture students complete one of the two Environmental Design pre-requisites. There is also a natural tendency for former architecture majors to apply for the Minor in Architecture. School of Architecture and Planning Academic Services provides direct advisement and other assistance for students who migrate from the Architecture B.S. to the Environmental Design B.A.

Our attrition rates make undergraduate academic advisement an indispensable and oft used service and responsibility. In 2001, the School of Architecture and Planning hired its current Assistant Dean for Undergraduate Education, R.J. Multari, who directs undergraduate academic services. Naturally, faculty mentoring occurs within the design studios, often referring students on for formal academic advisement. In response to the 2012 NAAB VTR cause for concern section 3.D.: *Advisement*, additional resources have been invested into Undergraduate Academic Services by the Office of the Dean with the hiring of two .5 FTE advisement assistants. In addition, the Assistant Dean for Undergraduate Education negotiated with University at Buffalo Career Services for a career advisor to work out of the School one morning a week to provide local career advisement. Moreover, one advisement assistant is assigned to maintain the School's LinkedIn page, and actively posts employment opportunities in Architecture on the site. Student progress towards the Architecture B.S. degree is tracked by both the Department staff person responsible for undergraduate studies, Susan McDonald and Mr. Multari. Ms. McDonald and Mr. Multari conduct academic performance audits, and review a student's general progress each semester. Students with course deficiencies or academic inadequacies are notified as soon as the semesterly academic review by the Department and the Undergraduate Academic Services unit. All probation and dismissal cases are reviewed by an academic standards committee, comprised of the department chair, the assistant dean for undergraduate education, and the undergraduate secretary. Comprehensive degree audits are performed by Mr. Multari and the advisement assistants within Undergraduate Academic Services, with Mr. Multari serving as school liaison to the Office of the Registrar. Once a sophomore, it is rare for a student to take more than three additional years to complete the B.S. in Architecture degree requirements (Educational Opportunity Program (EOP) students, who receive 5 years of state student aid, typically take a total of five years to complete the entire undergraduate program). Our undergraduate seniors are well equipped to go to any graduate program they desire. Many opt to stay in Buffalo, while others have been admitted to Harvard University, Princeton University, Yale University, Columbia University, MIT, University of Pennsylvania, University of Michigan, Cornell University, Cranbrook Academy, Sci-Arc, UCLA, University of Oregon, UC Berkeley, and other distinguished programs nationwide.

Graduate students in the Department are recruited, reviewed and enrolled directly by the Department of Architecture. While recognizing the provostal mission to increase the number of graduate students University-wide, the Department leadership has taken a difficult but appropriate policy position to prioritize quality, particularly regarding admission to the core 2-year track. Consequently, our graduate student body is arguably stronger and better prepared than in recent years. Attrition in the 2-year M.Arch track is

slight and most students complete their degree requirements within 2-2.5 years. Attrition in the 3.5 year track has decreased significantly in the past 5 years. Most 3.5 year track students complete their degree requirements within the expected 3.5 to 4 years. Maximum time frames for completing a graduate degree are set by the University's Graduate School, of which the Department is a member. Maximum timeframes are as follows: 2-year track: 4 years; 3.5-year track: 5 years; 1.5-year Master of Architecture: 3 years. Time extensions are possible with the support of the Chair and approval of the Dean of Graduate Students.

Graduate students are assigned a faculty advisor and have ready access to the Chair to discuss academic and professional development issues. The Assistant to the Chair, Debra Eggebrecht, is assigned to manage graduate student files. All probation cases, degree audits, thesis related paperwork and other graduate student matters are processed by Ms. Eggebrecht in consultation with the Chair. Students also consult with the assistant dean for graduate education who works closely with Ms. Eggebrecht and the chair to shepherd them through the program.

B. Student Development

The Department actively supports student organizations such as the AIAS (with permanent office space in Crosby Hall), the Graduate Student Association (GSA), the UB National Organization of Minority Architecture Students (NOMAS), Alpha Rho Chi (APX), and the Collective Student Government (with space and support provided by the Dean's Office). The Department has extended financial support to the AIAS Chapter president to attend the Annual AIAS Conference. Students attend and participate in Departmental and School-wide faculty meetings and are responsible for organizing events such as "Atelier," the Beaux Arts Ball, local architecture tours, and membership recruitment events. Student groups also organize selected lectures, workshops, charrettes, and other professionally and academically-oriented events throughout the year. All student government organizations make presentations at the beginning of the School year to the assembled student body to articulate their respective missions and recruit members.

Field trips to area landmarks are conducted as part of the Architecture History sequence and many studios. Students visit regional, national, and international locations to explore architecture and urban environments. The Department occasionally covers the cost of transportation for course-related excursions.

Students can significantly enrich their experience through the teaching and graduate assistantships that are offered through the department. We offer 32 fall semester positions and 28 positions in the spring semester. Extensive research assistantship opportunities within the department's research centers (in particular, the Center for Architecture and Situated Technologies, the IDEA Center, and the Urban Design Project) are also available to interested and qualified students. The department encourages and supports student participation in competitions in which they have done very well. For example, in 2011 a NYS AIA award went to a graduate student for her work in universal design. In 2012-13, a group of 5 graduate students, who designed and constructed a working beehive at Silo City (a product of the School-organized Hive City Competition), won a series of local, national, and international awards: The Buffalo Architecture Foundation Pro Bono Publico Award for Design Excellence in 2012, the Architizer A+Awards Jury Winner in Student Design/Build in 2013, and the Azure Magazine AZ Award for Best Student Work in 2013. Also in 2013, two undergraduate students received Second Place in the ACSA Fabric in Architecture Competition. In 2014, an M.Arch/MBA joint-degree masters study teamed up with two Ph.D. students from the Department of Chemistry to win \$25,000 in start-up funds to manufacture material coatings for "smart" windows or surfaces. Also in 2014, a graduate student was awarded first place in a

state-wide competition organized by the AIA of Western New York. Also significantly in 2014, an undergraduate student was awarded the SUNY Chancellor's Award for Student Excellence, the first time a student from the Department of Architecture has received this honor. The award was given in recognition of his academic record and active involvement and leadership in the community and campus life. The Department also encourages and supports student and alumni participation in conferences and other professional events. In 2013, two M.Arch alumni presented their UB thesis project at a national conference, the "Reclaim and Remake Symposium" held at the Catholic University of America in Washington DC. Additionally, one of the student designers of the Hive City project presented a TEDxBuffalo talk in 2013 and will be presenting a seminar at the 2014 AIA NYS Conference.

Numerous annual award and scholarship opportunities are available to help defray the cost of education and to recognize student achievement including the Pella Award, the Cannon Design Graduate Scholarship, the Wendel Undergraduate Minority Scholarship, the Stantec Consulting Services Award, the Henry Adams Medal Award, the ARCC Award, the AIA Scholarship, the Schomburg Fellowships, and various design excellence awards. The Mark Diamond Thesis Award, offered by the GSA, helps defray the cost of thesis-related work. The School's Brunkow Fellowship offers full-tuition waiver for a graduate student to function as editor of the School's bi-annual publication *Intersight*. The Cannon Design Publication Endowment ensures that the journal is professionally published. The department also supports students through various smaller scholarships in the \$1,000 - \$3,000 range including the Dean's Scholarship, Skerker's Scholarship, the Friends of SA&P scholarship, the Alumni Scholarship, the Kideney Scholarship and the Stoll Scholarship.

The Department's study abroad programs, offered both during the academic year and during the summer, provide valuable opportunities for seniors and graduate students. Since 2008, the Department has hosted programs in Monte Verde, Costa Rica; Barcelona, Spain; Dublin, Ireland; Tokyo/Kyoto, Japan; Beijing, China; Paris, France; and Amsterdam, Netherlands. In addition, the Department has active exchange agreements with architecture schools in Aarhus, Denmark and Weimar, Germany that benefit our students and enable European students to study in Buffalo.

C. Faculty

As is typical of architecture programs nationwide, both the full-time faculty and those with qualified titles typically carry contact hour loads that far exceed those of other disciplines. An undergraduate studio formally meets 10 hours/week and a graduate studio meets 11.6 hours per week. A full-time undergraduate instructor teaching studio plus a 3-credit course has 13 contact hours per week, while a full-time graduate instructor with a similar course load has over 14.6 contact hours per week. Full-time faculty operate under a 60/30/10 effort distribution model (60% teaching, 30% research, 10% service). Clinical and adjunct faculty are not formally responsible for research and/or service; they are compensated on a per-course basis. However, the Department understands that it is both in the interest of the unit, the students, and the visiting faculty themselves to foster an environment in which all instructors regardless of title are engaged in significant scholarship, practice and/or creative work in addition to teaching. The Department thus extends financial and other forms of support to all faculty members to the degree that resources permit and needs warrant.

All faculty are expected to be excellent teachers. Full-time faculty teach four courses per year and serve on graduate thesis committees each semester. It is also typical for a full time faculty member to serve either as freshman, sophomore, junior, or senior studio coordinators for one semester each year.

Tenure-track or tenured faculty appointments are made through competitive national and/or international searches. Tenure track faculty are assigned a mentoring committee consisting of tenured faculty members to guide them to tenure. The mentoring committees issue annual reports that assist the department chair in providing support to the faculty through teaching or service releases. A faculty member going up for tenure must provide the Promotions and Tenure Committee (P&T) with a dossier of research and teaching. The P&T solicits a minimum of 4 external reviewers from AAU schools to review the candidate. In most cases non-AAU school faculty are also solicited. Two internal letters are also provided. The tenured faculty votes on the candidate based on careful review of their dossier and external letters. The Chair and the Dean write letters of support which are attached to the dossier and sent for review by the Provost Review Board (PRB). The recommendations of the PRB are passed to the provost, who in turn recommends it to the president who passes it to the SUNY chancellor where the final decision made.

Teaching Assistants, composed from our graduate students, contribute significantly to our teaching resources. Teaching quality, and the ability for faculty to balance their teaching load with other obligations, is significantly affected by the availability and distribution of high quality teaching assistants.

For every course, the Department distributes standardized evaluation forms. Thus instructors have access to student feedback shortly after the semester ends. Student narrative responses are typed by Department staff to maintain the student's anonymity. The Chair also reviews student feedback and incorporates this material into year-end faculty reviews where appropriate. In addition, students have access to informal and formal grievance procedures at the level of the Department, the School, and the University.

The Department takes the IDP process seriously and has capable faculty serving in the position of IDP Education Coordinator. From 2008-2010 former UB Prof. Dennis Andrejko FAIA served as the IDP coordinator. Since 2011, Prof. Kenneth Mackay AIA has served as the IDP coordinator. Prof. Mackay also teaches the Professional Practice as well as Performance Programming classes, both of which deal with issues pertaining to the practice of architecture.

All full-time faculty participate in School governance, maintenance, and development by serving on standing and/or ad hoc committees. Curriculum, Admissions, Promotion and Tenure, Study Abroad, Computing & Media, Fellowships and Awards are standing Departmental committees.

The Department has successfully conducted several searches to fill critical vacancies. The Department conducted six successful searches since 2012 for positions in design/digital media, integrated design, urban design, landscape architecture and urban design, and design studio instructors.

The Department currently employs approximately 9 adjunct studio faculty and 5 adjunct non-studio faculty each semester from diverse geographic, academic, and scholarly backgrounds. Mention should be made of the Banham and McHale Fellowships that have brought significant visiting faculty to the School for one semester to a year to teach graduate and undergraduate level studios and seminars. In the past three years this program has brought 4 individuals to the School: Thomas Kelley (UIC), Ludovico Centis (Italy), Jordan Carver (Columbia), Dorita Hannah (New Zealand). Clinical (full-time) and Adjunct faculty carry a sizable portion of the teaching responsibilities and also contribute to our intellectual climate and reputation through their creative and professional work. The faculty composition for the most recent year is tabulated below.

	2014/2015
Tenure and Tenure-track	23
Qualified Titles (head count)	30
Qualified Titles (FTE)	28.89

Since our last APR, tenured/tenure-track faculty numbers have increased from 18 to 23. We have also maintained 5 faculty members in clinical full time positions.

D. Faculty Development

The faculty enjoy the full complement of sabbatical leaves and professional leave options offered in most major public research universities. Sabbaticals are available to full-time faculty once every seven years. During the period between Fall 2011-Spring 2014, four faculty requested sabbatical leaves and all were granted. Faculty conducting sponsored research can request course buy-outs in order to manage and complete research. Course buy-outs are 15% of annual salary; in the case of junior faculty, a 10% buy-out rate is available at the discretion of the Chair to stimulate the production of new research proposals. The Department also grants course release to facilitate the creative and scholarly work of those faculty not engaged in sponsored programs. New Assistant Professors are offered one course release during their initial year to facilitate the transition to academic life and to focus early on establishing a research/scholarship agenda. Another course release is offered to junior faculty after their third year reappointment.

In 2012 a Junior Faculty Development Fund was created to support junior faculty research. Each faculty member is given \$2,500 to spend on supporting their research, like attending conferences, hiring student assistants, buying out of teaching, professional development or many other opportunities. Additional travel funds are available to support and encourage participation at conferences where the faculty member will be presenting a paper or project. Junior faculty has priority in receiving this support. Additionally, starting in 2013, the Department of Architecture committed one graduate research assistant to each Junior Faculty Member.

Faculty submit Annual Reports and meet with the Chair to discuss progress, development, and course assignments at the end of the academic year. All faculty are routinely notified by the Department each Spring of the need to submit their reports and to meet with the Chair. Across-the-board salary increases for faculty and staff are negotiated by their unions (the United University Professions (UUP) and the Civil Service Employees' Association (CSEA)). Discretionary merit increases to salary base are based on recommendations to the Dean by the Chair. Faculty can self-nominate for discretionary raises and are reminded of this option each year by the UUP. The UUP also offers annual grants of up to \$1,000 on a competitive basis for all UUP faculty.

Advancing junior faculty towards tenure is an important priority in terms of faculty development. The Department maintains a formal three-year review process and provides tenure track faculty with annual mentoring sessions. Since 2012, three junior faculty have undergone interim reviews and two faculty (Profs. Hwang and Garofalo) have been promoted to Associate Professor with tenure. At present nine faculty (Geiger, Rafailidis, Bohm, Burkholder, Song, Silver, Bassett, Ozay, and Rajkovich) are being mentored for tenure. Prof. Geiger will submit his tenure application in Fall 2014. The others are in various stages of their tenure-track. Since 2008, every promotion dossier forwarded by the Department to the Dean, the Presidential Review Board and the Provost has been supported and approved.

E. Administration

The School's administrative structure consists of the Dean's Office, the Department of Architecture and the Department of Urban and Regional Planning.

The Dean, Robert Shibley, is the Chief Executive Officer for the School. He is advised by the School Council, composed of the Department Chairs, the Associate Deans and Assistant Deans, which meets monthly. Additionally, the Dean also has a Cabinet composed of Associate Deans and Chairs that meet weekly to provide advice on operational issues affecting the school.

The Chair, Omar Khan, is the principal administrator at the Department level. The current Chair teaches graduate studio and seminars, serves on thesis committees, and studio juries, but otherwise focuses on matters related to administration. As part of the administrative charge for the position, the Chair is part of the School-wide Dean's Council, and participates in School- and University-wide committees as needed. The Chair considers the enhancement of the teaching, learning and research environment, the physical as well as the intellectual and social, as central to his charge, and thus participates actively in all matters that have an impact on these factors.

The Director of Professional Studies(DPS), Joyce Hwang, assists the Department chair in staffing, administering curriculum and evaluating course content for the NAAB accredited MArch program. This is a new position that was established in 2013 and was the result reworking the MArch curriculum and its administration. The DPS is charged with maintaining the standards of our accredited program: evaluating whether courses are comprehensively covering NAAB SPC through annual reviews and final studio juries. The DPS is also charged with assisting the chair in staffing the courses with faculty qualified to deliver the material. The current DPS also teaches two studios and a seminar every year.

F. Staff

The Dean's Office consists of five Associate Deans, William McDonnell (responsible for school finances, facilities and operations), Bruce Majkowski (responsible for school data management, institutional analysis and commencement), Subbiah Mantharam (responsible for information technology, external affairs and development coordination, and Korydon Smith and Beth Tauke (sharing responsibility for academic and faculty affairs). There are also two Assistant Deans, RJ Multari (undergraduate education), and Shannon Phillips (graduate education), Greg Delaney, (Director of Recruitment and First Year Experience), an Assistant to the Dean, Barbara Carlson, and a school receptionist, Marion Brush. William McDonnell supervises support staff providing the following functions: Jessica Naish, Staff Assistant for Personnel, Procurement and Operations, Peter Russell, Manager of the Materials and Methods Shop, Lindsay Romano, Manager of the Digital Workshop, and Maryanne Schultz, Curator of the Visual Resources Center. Subbiah Mantharam supervises support staff providing the following functions: Samantha Stricklin, Manager of Technical Services, Shomari White, IT Support, Douglas McCallum, Manager of Web Services, and Rachel Teaman, Communications Officer.

The Department of Architecture staff consists of an Assistant to the Chair, Debra Eggebrecht and a keyboard specialist, Susan McDonald.

G. Events and Exhibitions

The School is home to a number of events that enrich the educational climate. Atelier, the School's open house that features the work of all studios in both Planning and Architecture, is mounted every Spring semester. The School's gallery is used for the annual Pella Window Competition and Exhibition that features nominated work from the senior studios.

Department faculty have been actively involved in staging ambitious architecture exhibitions in venues in Buffalo and abroad. Recent highlights since the 2012 Accreditation visit include:

In 2012:

- Mark Shepard's "Sentient City Survival Kit" and Joyce Hwang's "Bat Cloud" projects were exhibited in the U.S. Pavilion at the 13th International Venice Architecture Biennale. Shepard, Hwang and Jordan Geiger also conducted presentations and workshops at the U.S. Pavilion as part of the Venice Biennale.
- Hwang's "Bat Cloud," Geiger's "Beau-Fleuve" and Laura Garofalo's "Water Flow Pavilion" were installed in public spaces in the City of Buffalo as part of an event series sponsored by the UB Humanities Institute, entitled "Fluid Cultures."
- Dennis Maher was selected as the Albright Knox's 2012 Artist in Residence and exhibited a collection of work under the title "House of Collective Repair." Since 2009 Maher has been developing a body of work using his own house, named "The Fargo House," as a site for exhibitions and installations.

In 2013-14:

- Georg Rafailidis and Stephanie Davidson's "Mirror Mirror" street tent project won first place in a competition sponsored by Storefront for Art and Architecture and Architizer, and was subsequently constructed and exhibited at the New Museum in New York City. The project has also been subsequently exhibited in Buffalo's Echo Art Fair, and again at the 2014 Albright-Knox Art Gallery Summer Festival.
- Chris Romano and Nick Bruscia, along with students Dan Vrana and Philip Gusmano, designed and constructed a large sculptural gateway wall, titled 2XmT in Silo City, Buffalo. In 2014, the project has subsequently won three awards in the Architizer A+ Competition. Another project by Romano and Bruscia, 3xLP, was selected as the first place winner of TEX-FAB Competition and exhibited at ACADIA 2013 at the University of Waterloo and TEX-FAB Exhibition in Austin.
- Brad Wales, with architecture student Isabella Brito and artist Brian Milbrand, designed and constructed "The Front Yard, an outdoor installation at the Burchfield Penney Art Center.
- Laura Garofalo's project "Buoyant" was selected and built for the 13th International Garden Festival of the Jardins de Métis/Redford Gardens in 2013. The project was also reinstalled for the 2014 Festival.
- Jordan Geiger's work under the title of "Very Large Organizations" was exhibited at Studio X in New York City and WUHO Gallery in Los Angeles.
- Jin Young Song's project "Tensile City" was exhibited as part of the 2013 CITYVISION Competition Exhibition in Rio de Janeiro, and was also exhibited at Studio-X in New York City and WUHO Gallery in Los Angeles.
- Hwang's "Bat Cloud" was selected to be included in the 2014 International Architecture Biennale in Rotterdam, for which she designed and built a 2nd iteration of the project.

Other significant endeavors by faculty:

- Solar Decathlon: Martha Bohm and Brad Wales directed several semesters of coursework that resulted in being selected as one of 20 school teams to compete in the 2015 U.S. Department of Energy Solar Decathlon. Bohm and Wales, together with their students, are currently working to design and build an energy efficient, solar-powered home for the competition, with plans to reinstall the project permanently in Buffalo
- Major Competitions: Jin Young Song received the Grand Prize from Hyundai E&C for his project "P-A-R-T::Prefabricated Apartment Remodeling Type" which will be implemented in an urban housing redevelopment plan.
- Pro Bono Project: Laura Garofalo and Omar Khan, together with several students and alumni, designed and developed "DIG," a co-working space project for the Buffalo Niagara Medical Campus.

Significant Awards:

- Dean Robert Shibley received the 2014 AIA Thomas Jefferson Award for Public Architecture
- Edward Steinfeld received the James Haecker Award for Distinguished Leadership in Architectural Research, from the ARCC.
- Beth Tauke received the University at Buffalo's President Emeritus and Mrs. Meyerson Award for Distinguished Undergraduate Teaching and Mentoring.
- Lynda Schneekloth and Sue Weidemann received 2014 Career Award from the Environmental Design Research Association.
- Joyce Hwang received the 2014 Emerging Voices Award from the Architectural League of New York.

The Department has hosted and/or supported several events including the following which have taken place since the last accreditation visit:

Fall 2012

Symposium: BEYOND PATRONAGE: RECONSIDERING MODELS OF PRACTICE

Organized by Joyce Hwang, Martha Bohm, Shannon Phillips, Gabrielle Printz

Hansy Better Barraza, Studio Luz, Boston, MA; Lori Brown, Syracuse University, Syracuse, NY; Yolande Daniels, StudioSUMO, New York, NY; Natalie Jeremijenko, Environmental Health Clinic, New York, NY; Lola Sheppard, Lateral Office, Toronto, ON; Juliette Spertus, Fast Trash, New York, NY; Linda Taalman, Taalman Koch Architecture, Los Angeles, CA; Georgeen Theodore, Interboro Partners, New York, NY; Denise Juron Borgese, Buffalo Architecture Foundation, Buffalo, NY; Bhakti Sharma, Buffalo Architecture Foundation, Buffalo, NY; Courtney Creenan, Flynn Battaglia, Buffalo, NY; Kathy Callesto, Cannon Open Hand Studio, Grand Island, NY; Joy Kuebler, Joy Kuebler Landscape Architect, North Tonawanda, NY

Spring 2013

Symposium: ON ERROR, Organized by Thomas Kelley, Banham Fellow

Kelly Bair, University of Illinois Chicago; Sarah Blankenbaker, University of Illinois Chicago

Georg Rafailidis, UB; Eva Franch-Gilbert, Storefront for Art and Architecture, New York, NY; Jordan Geiger, UB; Omar Khan, UB; Jimenez Lai, University of Illinois Chicago; Sean Lally, University of Illinois Chicago; Sergio Lopez-Pineiro, UB; Paul Preissner, University of Illinois Chicago

Conference: SOCIETY OF ARCHITECTURAL HISTORIANS CONFERENCE

Co-Chaired by Despina Stratigakos (UB Architecture) and Tom Yots (Preservation Buffalo Niagara)

Including Panel Discussion: Robert Shibley, Goldberger, and Catherine Schweizer

Symposium: BUILDING OUT AND BUILDING UP: UNDERSTANDING URBAN HYPERDEVELOPMENT IN CONTEMPORARY CHINA

Organized by the Department of Planning, and co-sponsored by the Confucius Institute and Department of Asian Studies

Conference: MEDIACITIES

Organized by Jordan Geiger, Mark Shepard, and Omar Khan

Keynote speakers include: Benjamin Bratton, Stephen Kovats, Mike Crang

See <http://mediacities.net/site/schedule/> for conference speakers

Fall 2013

Symposium: BUILDING TALENT: WOMEN, PATRONAGE, AND MENTORING

Organized by the UB Gender Institute

Kelly Hayes McAlonie

Screening of "A Girl is a Fellow Here – 100 Women Architects in the Studio of Frank Lloyd Wright," with panel: Beverly Willis, Wanda Bubriski, and Jack Quinan
Lori Brown, Susan Chin, Marika Shiori-Clark, Joyce Hwang

Conference: 2nd Buffalo Food Policy Summit

Organized by Samina Raja

Keynote: Dr. Julian Agyeman, Tufts University

Panel: Himanshu Grover, Heather Orom, Ted Schmidt, Samina Raja

Public Forum: What can food policy councils do for consumers? (Sponsored by the Food Systems Planning and Healthy Communities Lab)

See full list of speakers here: <http://hkhcbuffalo.org/2nd-buffalo-food-policy-summit/>

Conference: ACADIA 2013: ADAPTIVE ARCHITECTURE

Organized by Philip Beesley (University of Waterloo), Omar Khan (UB), and Michael Stacey (University at Nottingham)

Keynote Speakers: Michelle Addington, Yale University; Cristiano Ceccato, Zaha Hadid Architects
Stephen Gage, UCL/The Bartlett

Workshop: Design for Manufacturability and Constructability: Custom Terra Cotta Facades

Location: Boston Valley Terra Cotta,

Instructors: Mitchell Bring, Peter Schmidt, Andrew Pries, Mike Fritz, Guy Logel

Description: Explore using Rhino 5 /Grasshopper designs to develop Terra Cotta tiles and rain screens for building façades.

Workshop: Rigidized Metal Forming

Location: Rigidized Metals Corporation Facility/Silo City

Instructors: Nick Bruscia, Chris Romano

Description: Investigate the structural and specular qualities inherent in thin-gauge textured stainless steel.

Recent Exhibits (in the Hayes Lobby Gallery or Hayes Annex A, unless noted)

Fall 2012

Health Plans – International Competition to Design the School of Medicine and Biomedical Sciences (Grimshaw and Davis Brody Bond, HOK, Pelli Clarke Pelli Architects and Cannon Design, Rafael Vinoly Architects with Foit-Albert Associates)

Spotlights on Students – Study Abroad Works from Costa Rica, Japan, and Spain

The Pella Awards

Reconstructing Practices

An Argument for Basic Design: To Build Aesthetic Judgment / Studies from William Huff's Graduate Workshops

Spring 2013

Gregory Delaney: B/a+p Goes South (in Crosby Hall)

Perry Kulper: Secret Decoder Ring

Thesis Posters

Thomas Kelley, Banham Fellow: Wrong Chairs

End of the Year Show

Dennis Maher: House of Collective Repair (at Albright Knox Gallery)

LifeCycles: Proposals for An Orangery and Demonstration Garden by UB Architecture Students (at Buffalo and Erie county Botanical Gardens)

Time Mutations (at UB Art Gallery, North Campus)

Fall 2013

Gregory Serweta and Stephanie Vito: Border-Line (N): Fringe Installation (in Crosby Hall)

Brad Wales, Brian Millibrand and Isabella Brito: Front Yard Project (at Burchfield Penney)

Jordan Geiger: Very Large Organizations (at Studio-X New York)

TEX-FAB International Digital Fabrication Competition: SKIN (hosted by ACADIA 2013 at University of Waterloo)

Spring 2014

Gregory Delaney: B/a+p Goes West (in Crosby Hall)

Senior Studio: City/Life

Solar Decathlon Studio

Atelier Exhibition (in Crosby Hall)

Drawing Against Gravity: Work from course of Dennis Maher (at Glow Gallery, Buffalo, NY)

Ludovico Centis, Banham Fellow: The Eternal Blast: Monuments of the Manhattan project in the Empire State (at Eleven Twenty Projects, Buffalo, NY)

End of the Year Show

Additionally, the UB School of Architecture and Planning has started hosting a series of alumni networking events in various cities across the U.S. The events, titled "Buffalo in...", started with "Buffalo in New York" in May 2013, continued with "Buffalo in Philadelphia" in March 2014, and "Buffalo in Chicago" in June 2014.

H. Lecturers and Critics

The Department believes that a lively exchange of ideas is essential to the intellectual health of the School. Guest critics and invited speakers are an important vehicle for exposing Buffalo students and faculty alike to new impulses that are shaping the discourse of the field. The Department therefore makes every effort to maintain a vibrant lecture series and a constant stream of guest critics. Not infrequently, guest speakers offer important material for local and regional professionals and other members of the public as well. Events are therefore widely advertised: the web site contains a complete list of all events and biographies of guest speakers. Posters are mailed to regional professionals, alumni, and all ACSA Schools, and are displayed throughout the School. Faculty and students receive biographies of speakers at the beginning of each semester and additional notices are posted before each event. Events typically take place in the School's lecture facility in Crosby Hall. A similar, albeit somewhat more modest, routine applies to celebrating end-of-semester reviews, which are valuable extensions of the studio pedagogy and promoted as such.

The endowed annual Clarkson Chair in Architecture brings a distinguished practitioner or scholar to the School for a week of seminars, lectures, critiques and social gatherings. Clarkson chairs are selected by the Department faculty.

Fall 12

Dorita Hannah (McHale Fellow) and Sarah Bay-Cheng (UB Associate Professor of Theatre)

Mark and Peter Anderson, AndersonAnderson, San Francisco, CA

Andreas Huyssen, Professor of German and Comparative Literature, Columbia University

Beyond Patronage, Organized by Joyce Hwang, Martha Bohm, Shannon Phillips, Gabrielle Printz (See I.2.1.G Events and Exhibitions – Symposia)

Li Xiaodong, Li Xiaodong Atelier, Beijing

Ed Blakely, University of Sydney

Martin Felsen, UrbanLab, Chicago, IL

Spring 13

On Error Symposium, Organized by Thomas Kelley, Banham Fellow (see I.2.1.G Events and Exhibitions - Symposia)

Harold Cohen and Al Gowan

Inaki Alday, aldayover architecture and landscape

Vikramaditya Prakash, Chandigarh Urban Lab, University of Washington

Perry Kulper, University of Michigan

Andrew Herscher, University of Michigan

John Forester, Cornell University

Faranak Miraftab, University of Illinois

Yoshiharu Tsukamoto, Atelier Bow Wow, Tokyo, Japan

Charles Waldheim, Harvard University

Anne Lacaton (Clarkson Lecture), Lacaton Vassal, Paris, France

Society of Architectural Historians Conference (see I.2.1.G Events and Exhibitions)

Qing Shen (Jammal Lecture), University of Washington

Bill McKibben (Commencement Speaker)

Fall 13

ArchiCULTURE: A Compelling Glimpse into the Architectural Studio Film Screening, organized by the Architecture Graduate Student Association (GSA)

Qing Shen (Jammal Lecture)

John Peterson, Public Architecture, San Francisco, CA

John Syvertsen, Cannon Design Open Hand Studio, Chicago, IL

2nd Buffalo Food Policy Summit, organized by Samina Raja (see I.2.1.G Events and Exhibitions – Conference)

Billie Tsien, Tod Williams and Billie Tsien Architects, New York, NY

Chris Reed, Stoss Landscape Architecture, Boston, MA

Lesley McIntyre, University of Dundee School of Computing, Scotland

Robert Maschke, Robert Maschke Architects, Cleveland, OH

Building Talent Symposium, Organized by The UB Gender Institute (see I.2.1.G Events and Exhibitions - Symposia)

ACADIA 2013: Adaptive Architecture Conference, Organized by Philip Beesley, Omar Khan, and Michael Stacey (see I.2.1.G Events and Exhibitions – Conference)

Spring 14

Aaron Moulton,* Gagosian Gallery

George Ranalli, CUNY School of Architecture

Jonathan Richmond (Jammal Lecture)

David Kamp, Dirtworks

Lew Hopkins, University of Illinois Urbana-Champaign (Clarkson Lecture-Planning)

Eva and Franco Mattes,* 0100101110101101.org

Matthew Coolidge,* Center for Land Use Interpretation

Keersten Geers,* OFFICE, Brussels, Belgium

Billie Faircloth, Kieren Timberlake, Philadelphia, PA

Guy Nordenson (Clarkson Lecture), Guy Nordenson Structural Engineers LLP, New York, NY

Walter Hood (Commencement Speaker)

Kelly Hayes McAlonie (UB Capital Planning) and Elisabeth Perreault (Cannon Design), in conversation, organized by Gabrielle Printz for ArchiteXX

* Lectures organized by Ludovico Centis, Banham Fellow

Recent Guest Critics:

2011/2012

Tony Borgese, Nate Cornman, Rafal Godlewski, Anna Silverstein, Cesar Cedano, Mike Conroe, Damen Hamilton, Michele Han, Stephanie Vito, Gregory Serweta, Chris Siano, David Zielinski, Charles Gordon, Eliza Higgins, Gregory Marinic, Will Ransom, Jon Spielman, Erik Conrad, Bruce Lonsway, David Lage, Michael Stefanone, Mike Anderson, Brad Culver, Rick Smith, Jim Watkins, Tammy Milello, Ken Schmitz, Pablo Ros Fernandez, Jeremy Ficca, James Conley, Kevin Connors, Tadd Heidgerken, Charlie O'Geen, Dorita Hannah, Shayne O'Neil, Ryan Glick, Chris Guerra, Dirk Schneider, Gerry Strickland, Elisabeth Perreault, Robert Stark, Michael Tillou, Joshua Gardner, Chloe Town, Jeffrey Chusid, Marie Carone, Jacqueline Gargus, Maria Denegri, Tom Bessai, Chan Byun, Michele Han, Elisabeth Perreault, Alexandra French, Ryan Ludwig, Maya Przybylski, Jon Yoder, Christos Marcolous, Adrian Blackwell, Phil Snyder, David Swarts, Josh Cerra, David Biersch, Adrian Blackwell, Jennifer Harmon, Martin Hogue, Dave Majewski, Marc Miller, Kent Muirhead, David Salomon, Rick Smith, Etienne Turpin, Jim Watkins, Jamie Vanucci, David Allin, Phillip Beesley, Mark Bajorek, Dennis Black, Jose Change, Sekou Cooke, Maciej Kaczynski, Catie Newell, Charlie O'Geen, Mike Silver, Pat Whalen, Steven Zacks, Michael Pelken

2012/2013

David Mah, Leyre Asensio, Mehrdad Hadighi, Javier Arbona, Ken Bailey, Damon Rich, Lori Brown, Shane Williamson, Janette Kim, Alex Mergold, Inaki Carnicero, Jay Price, Joy Kuebler, Dorita Hannah, Ayelet Karmon, Maria Denegri, Patrick Fejer, Kristina Ljubanovic, Jonathan Enns, Alexandra French, Elisabeth Perreault, Robert Stark, Shayne O'Neil, Marie Carone, Kathy Callesto, David Salomon, Ben Siegel, Rick Smith, Jim Watkins, Jon Buono, Mary Golden, Michael Zebrowski, Peter Heller, Ken Smith, Ed Watts, Jr., Brian Kelly, Matthieu Bain, Joe Wassell, Ed Wilczinski, Allison Adderley, Joshua Gardner, Adam Pyse, Cesar Cedano, Anne Dafchik, Adam Sokol, Leanne Stepien, Mike Conroe, Will Ransom, Mark Nowaczyk, Chan Byun, Jessica Wade, Jose Chang, Carlos Rodriguez, David Salomon, Mauro Cringoli, Alex Harris, Fred Scharmen, Julie Larsen, Roger Hubeli, John Zissovici, Andrew Thurlow, James Lowder, Jin Young Song, Fionn Byrne, James Richards, Dorita Hannah, Mike Silver, Maeryta Medrano, Matthew Spremulli, Jeffrey Bailey, Natalie Tan, Nancy Redeye, Steve Ranalli, Barbara Leggett, Aimee Treis, David Kamp, Chan Byun, Leanne Stepien, John Doster, Michael Conroe, Stephanie Vito, Eric Lindstrom, Tim Rider

2013/2014

Ramon Bosch, Carla Leitao, Melanie Fessel, Liam Ross, Frederick Schnee, Josh Bard, Steven Mankouche, Amber Bartosh, Pari Riahi, Lydia Kallipoliti, Nicole McIntosh, Merritt Bucholz, Alessandra Cianchetta, Rebecca Henn, David Celento, Cristina Parreno, Henry Smith-Miller, Martin Cox, Betsy Williamson, Ralph Ghoche, Julie Larsen, Roger Hubeli, Alison Nowak, Ron Jelaco, Ashar Nelson, Steven Chodoriwsky, Karen Lutsky, Jamie Vanucchi, Anda French, Sarah Blankenbaker, Greg Marinic, Maya Przybylski, Igor Siddiqui, Jordan Carver, Dana Cupkova, Dustin Tobias, Anthony Piermarini, Nicholas Rajkovich, Greg Corso, David Shanks, Tim Stenson, Heinrich Hermann, Maria Denegri, Tadd Heidgerken, Chris Perry, Chan Byun, Kelly Hayes McAlonie, James Rayburg, Tobias Westermann, Courtney Creenan, Stephanie Vito, Steve Shchurowsky, Linsey Graff, John Doster, Anne Dafchick, Leigh Waterman, Dan

Stripp, Elisabeth Perreault, Eric Lindstrom, Jitendra Vaidya, Jay Burney, Renata Kraft, Timothy Rider, Jeffrey Bailley, Michael LaValley, Kevin Connors, Joan Bozer, Aaron Bartley, Mark McGovern, Mark Stevens, Janice Stevens, Ryan McPherson, Lynda Schneekloth, Sergio Lopez-Pineiro, Marc Bohlen, Teri Rueb,

1.2.2. Administrative Structure & Governance

The University at Buffalo is accredited by The Commission on Higher Education of the Middle States Association of Colleges and Secondary Schools and by the New York State Board of Regents. The University is a member of the Association of Colleges and Universities of the State of New York, the National Association of State Universities and Land Grant Colleges, the Association of Urban Universities, the American Council on Education, and the prestigious Association of American Universities.

The School of Architecture and Planning is the only unit in the State University of New York system to offer accredited degrees in Architecture and Planning. The School consists of two academic Departments, the Department of Architecture and the Department of Planning. The School has administrative and fiscal responsibility for two professional degree programs. The School's administrative structure consists of the Dean and the Dean's support staff, and two Department Chairs (Architecture and Planning) and their respective support staffs. The Department Chairs report to the Dean, and the Dean reports to the Provost. This general structure is typical of all other academic units at the University at Buffalo.

See Part 4.1 for School and Department Organizational Chart

1.2.3. Physical Resources

A. Physical Plant Summary

Departmental functions are distributed in three proximate buildings, Hayes Hall, Crosby Hall, and portions of Parker Hall (See inserts, next several pages). However, for the next two years while Hayes Hall undergoes a major renovation, the School and Department Administration has been moved to Diefendorf Hall, its library to the Health Sciences Library, and faculty offices and research centers to the Hayes Annexes (see Pages 47-49). These temporary quarters still provide proximity to Crosby Hall which continues to house the studio spaces. Upon completion of the Hayes Hall renovation in 2015, administration, faculty, and research centers will return to Hayes Hall. In the summer of 2015, Crosby hall will undergo the first of two planned renovations. This first phase will update all lavatories to be ADA compliant, address plumbing infrastructure issues, install a new high-speed elevator, and remove walls in the basement to create large studio spaces for our freshmen students. Phase 2 of the Crosby renovation, expected to occur within the next few years, will replace building systems, windows and roofs, and remove studio walls allowing the creation of large open studio spaces. The University has committed over \$50M for these capital improvements.

Hayes Hall, upon completion of renovations, will house the school's and department's administrative offices, faculty and staff offices, computing and print labs, classroom and seminar spaces, research centers, informal learning spaces, and a public gallery space. All floors will be serviced by two ADA compliant elevators. Parker Hall houses the freshman studios, freshman faculty/teaching assistants office space, the School's Materials and Methods Shop and the Digital Workshop. All functions occur on the ground floor of Parker Hall. Crosby Hall houses all other studios, critique spaces, wet lab preparation spaces, additional faculty research and office spaces, additional computing facilities the School's main lecture hall, and student government offices. All floors are serviced by an ADA compliant elevator. Square footage allocations and descriptions of key spaces follow.

2014

Diefendorf Hall: Meeting and Classrooms:	1,040 sq. ft.
Admin/Staff Offices:	<u>4,661 sq. ft.</u>
Net Total	5,701 sq. ft.
Hayes Annex A: IDEA Center:	4,169 sq. ft.
Studio/Gallery:	<u>4,216 sq. ft.</u>
Net Total	8,385 sq. ft.
Hayes Annex B: Faculty Offices:	2,548 sq. ft.
Studios:	1,635 sq. ft.
Classrooms	<u>1,538 sq. ft.</u>
Net Total	5,721 sq. ft.
Hayes Annex C: Center for Architecture and Situated Technologies:	1,228 sq. ft.
Faculty Offices:	<u>167 sq. ft.</u>
Net Total	1,395 sq. ft.
Health Science AP Library:	5,000 sq. ft.
Net Total	5,000 sq. ft.
Crosby Hall: Studios	25,766 sq. ft.
Critique Space	2,118 sq. ft.
Lecture Hall	1,700 sq. ft.
Classrooms	1,165 sq. ft.
Support	1,037 sq. ft.
Computing/Print Labs	3,015 sq. ft.
Visual Resources Center	351 sq. ft.
Faculty Offices	<u>902 sq. ft.</u>
Net Total	36,054 sq. ft.
Parker Hall: Shop	8,379 sq. ft.
Studios	6,787 sq. ft.
Faculty Research Space	<u>1,059 sq. ft.</u>
Net Total	16,225 sq. ft.
Total Space Used	78,481 sq. ft.

B. Hayes Annexes (A,B,C)

The Research Centers

The three principal architecture research centers are the Center for Inclusive Design & Environmental Access (IDEA), the Urban Design Project (UDP), and the Center for Architecture and Situated Technologies (CAST).

The IDEA Center, directed by Prof. Edward Steinfeld, is dedicated to advancing the field of universal design through research and development, professional services, education and dissemination. The Center received a major \$3 million federal grant in 1999 to establish the Rehabilitation Engineering

Research Center on Universal Design & the Built Environment. That grant was renewed in 2005 for another five years with a budget of \$5 million and again in 2010 for another \$5 million. The Center also conducts extensive funded work for local, state, federal, private and corporate entities and offers traditional and online continuing education courses. Two faculty in Architecture (Profs. Steinfeld and Tauke) and two others in Industrial Engineering and Rehabilitation Sciences, four full time staff, 5-6 student research assistants, and additional project-specific faculty work in the IDEA Center. Full-scale and computer simulations are routinely used in the Center's research. The Center has received 3 patents and is engaged in several product development activities with both small and large companies. Center staff published *Inclusive Housing: A Pattern Book* (Norton) in spring of 2010 and authored the first textbook on universal design to be published by Wiley in spring, 2012. An important new initiative is a partnership to develop a universal design certification system for buildings similar to LEED. In 2000, the IDEA Center was targeted for renovation in terms of space, ADA compliance, lighting, furnishing and finishes in the amount of approximately \$180,000. The Center is active internationally through information sharing, exchange visits and collaborative projects with research centers in Canada, Australia and the Nordic Countries.

The Urban Design Project (UDP), directed by Prof. Robert Shibley, conducts extensive service learning research for city and regional agencies. The work of the UDP has burgeoned during the past 5 years. The UDP has several affiliated faculty, three full-time staff, and several student research assistants as well as extensive archives of area maps and plans. It has a 21 year history of substantial contributions and engagement of the region as a teaching and research resource.

The Center for Architecture and Situated Technologies (CAST) is a University recognized focus of strategic strength whose research is located at the intersection of architecture, new media and computational technologies. The Center is co-directed by Profs. Omar Khan and Mark Shepard. Its membership includes three other faculty members Associate Professor Hadas Steiner, Assistant Professor Jordan Geiger and Clinical Adjunct Professor Nick Bruscia. The Center's focus areas include responsive/ interactive architecture, urban computing and architecture and information technologies. It is involved in projects that have received funding from the New York State Council on the Arts, New York Foundation for the Arts and Creative Capital. CAST employs several students and collaborates with faculty across the department, colleges and various universities. It also sits on the advisory committee for the UB2020 Strategic Strength in Information and Computing Technologies (ICT) for which it contributes on issues pertaining to human-computer interaction and smart environments. The center was also co-sponsor of the "Architecture and Situated Technologies Symposium" held in 2006 at the Architectural League in New York. CAST's computing lab, which is temporarily housed in Hayes Annex C, occupies 1,128 sq.ft. was marginally upgraded and furnished largely with sweat equity by CAST faculty and students. With the expansion of research and its active participation in developing inter-disciplinary grants with Information and Computing Technologies (ICT).

Faculty Offices

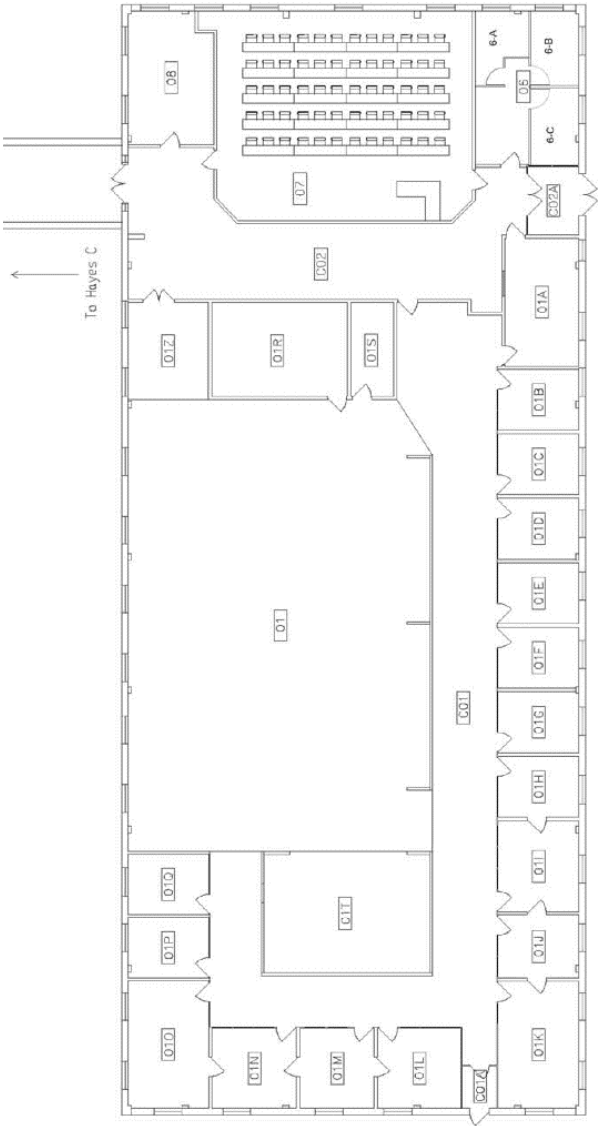
Each full-time faculty member has a private, day lit office in Hayes Annex B, Hayes Annex C or Crosby Hall. Full-time faculty are provided with a computer and telephone in each office. In addition, most visiting faculty have office spaces with computers and telephones.

Hayes Hall Annex A



- "CIRCLE": Food Lab Entrance
"STAR": IDEA Lab Entrance
- | | | | |
|------------------------|------------------------------|---------------------------------------|------------------------|
| 01: Exhibit Space | 07A: Kitchen / Meeting Space | 17: Danise R. Levine | 22C: Donna Banach |
| 01A: Custodial Storage | 08: Mechanical | 19: So-Ra Baek | 22D: Student Workspace |
| 01B: Storage | 10: IDEA reception Area | 20: IDEA Research Lab | 22E: Jeanne Leccese |
| 05: Men's room | 11: Kitchen | 21: IDEA Conference Room | |
| 06: Women's Room | 12: Edward H. Steinfield | 22: Student Workspace / Meeting Space | |
| 07: Student Workspace | 14: Jordana L. Maisel | 22A: Bumjoon Kang | |
| | 15: Jonathan White | 22B: Solhyon Baek & Samina Raja | |
| | 16: Hearnhand Subryan | | |

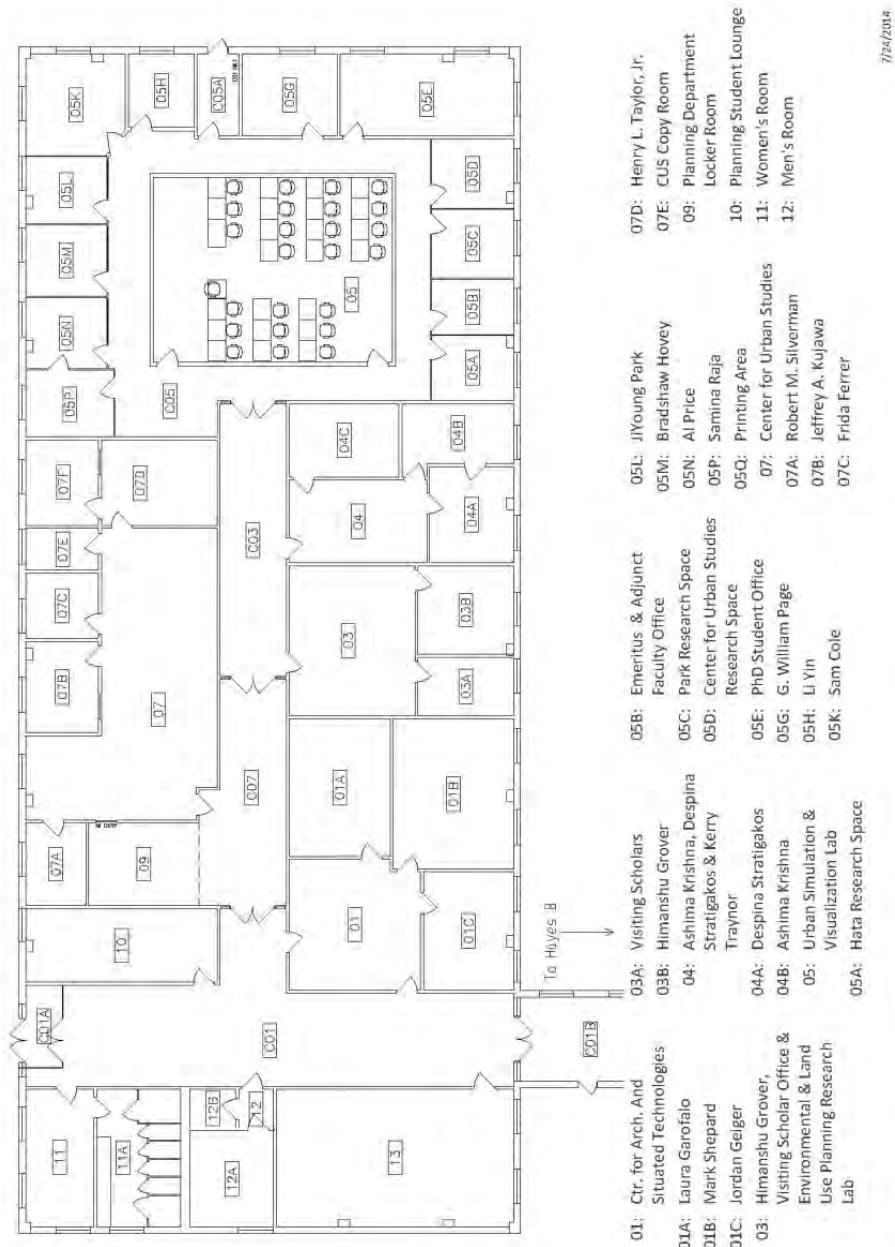
Hayes Hall Annex B



- 01: Architecture 3.5 Year 2 Studio Space (Carter & Bassett); Planning Undergraduate Studio Space (LeCesse & Warren)
- 01A: Stephanie Davidson & Georg Rafailidis
- 01B: Kenneth Mackay
- 01C: Hadas Steiner
- 01D: Nicholas Rajkovich
- 01E: Joyce Hwang
- 01F: Sean Burkholder
- 01G: Jordan Carver (Banham Fellow)
- 01H: Jin Young Song
- 01I: Hiroaki Hata
- 01J: Martha Bohm
- 01K: Seminar Space
- 01L: Daniel B. Hess
- 01M: Brian Carter
- 01N: Annette LeCuyer
- 01O: Jean LaMarche & Beth Tauke
- 01P: Korydon Smith
- 01Q: Michael Silver
- 01R: Mechanical
- 01S: CIT Media Services
- 01T: Graduate Planning Studio Space (Traynor)
- 01Z: Printers & Scanners
- 06: Shannon Bassett, Julia Jamrozik & Erkin Ozay
- 06A: Julia Jamrozik
- 06B: Shannon Bassett
- 06C: Erkin Ozay
- 07: Classroom
- 08: Graduate Planning Studio Space (Grover)

8/15/2014

Hayes Hall Annex C

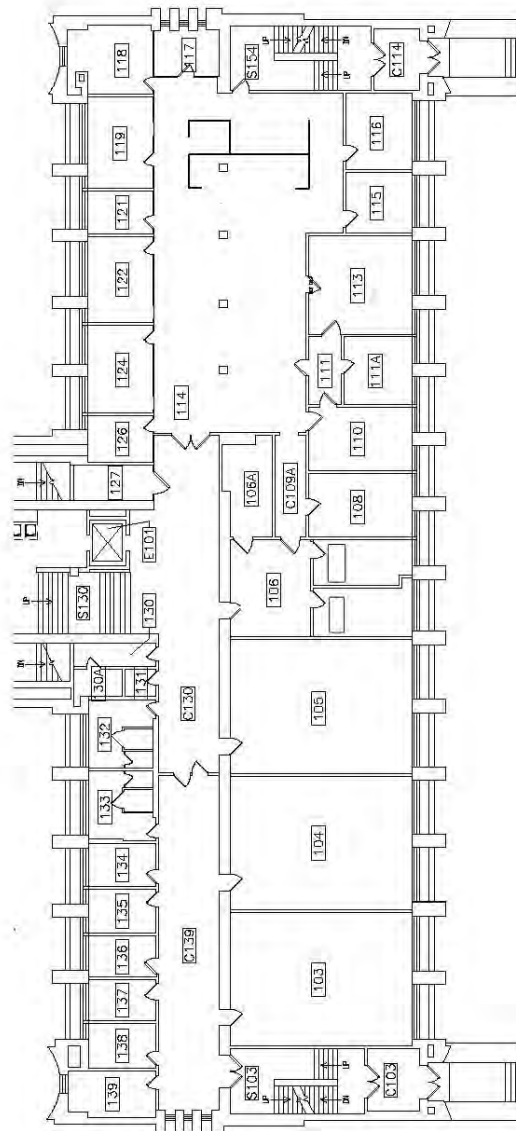


C. Diefendorf Hall

Administrative Offices

All principal administrators have private, day lit offices in Diefendorf Hall. The assistant to the Chair and department secretaries share an open space. The dean's wing is part of the same space, located opposite to the Chair's office. The suite contains a conference room and the faculty has access to a common kitchen.

Diefendorf Hall Floor 1 (selected)



- | | | | | |
|--------------------------|---|--------------------------|----------------------------|------------------------|
| 104: Classroom | 111A: Office of the Dean | 116: Shannon Phillips | 127: Mechanical | 138: Mail Room |
| 105: IT Services | 113: Robert Shibley | 117: Advising Assistants | 130: Maintenance Storage | 139: Intersight Office |
| 106: IT Services | 114: Architecture and Planning Admin. Offices: | 118: R.J. Multari | 131: Maintenance | |
| 106A: Storage | Marion Brush, Debra Eggebrecht, Norma Everett, Sue McDonald, Donna Rogalski & student staff | 119: Ernest Sternberg | 132: Women's Lavatory | |
| 106B: Samantha Stricklin | | 121: Rachel Teaman | 133: Men's Lavatory | |
| 106C: Subbiah Mantharam | | 122: Omar Khan | 134: Kitchen | |
| 108: Bruce Majkowski | | 124: Jessica Naish | 135: Office of Development | |
| 110: Conference Room | | 125: Greg Delaney | 136: Storage | |
| 111: Barbara Carlson | 115: William McDonnell | 126: Douglas McCallum | 137: Storage | |

7/24/2014

D. Crosby Hall

Studios and Studio Support Spaces

All studio levels with the exception of the freshman class are held in Crosby Hall. Studio levels are arranged, as much as possible, in a spatially hierarchical fashion: sophomore studios on the first floor; junior and seniors are on the second, and graduate studios and thesis rooms are on the third. All freshman studio spaces are in day-lit spaces in Parker Hall.

All studio spaces are networked with gigabit wired networking allowing students to connect self-owned equipment. All studio spaces are also supported by G-level wireless networking. High capacity print and plot output is provided through the Crosby Hall Print Lab on the first floor, and letter and tabloid b/w and color output are available in Hayes B and Hayes C during the renovation of Hayes Hall. Digital fabrication support is now integrated with the Materials and Methods Shop in Parker Hall and includes laser cutting via two devices, monochrome, and color 3D printing, 3 and 5 axis CNC milling.

In response to concerns regarding environmental health and safety, one room on each floor is designated a wet-cell/preparation room. High-grade spray booths venting directly to the exterior exist on the second and third floors. All prep rooms have sinks with plaster traps.

Space has been made available in the basement of Crosby Hall to support faculty-initiated design projects and competitions. While not ideal for formal courses, use of these spaces has proven to be of great value to faculty conducting creative work; having design faculty working in parallel and in close proximity to the students has had a very positive effect on the general energy level of the studio environment. Space has also been made available in the basement to support thesis students pursuing full-scale installation projects. Swipe locks have been installed at the building perimeter to provide after-hours security.

Visual Resource Center

The Visual Resource Center (VRC) is an administered collection within the School of Architecture and Planning, separate from the University Library system. During the Hayes Hall renovation it is temporarily housed in 145 Crosby Hall. The collection includes 52,000+ slides, 27,000+ digital images, and 695+ videos and DVDs. Additionally, the VRC streams a selection of lectures online from the School's Lecture Series. The VRC is staffed by a full-time Curator and by a part-time student assistant. VRC collection development is supported by the VRC curator, Department of Architecture faculty, and the APL librarian. A \$2,000 annual budget is allocated for new acquisitions and collection maintenance. The VRC Director records School-sponsored events such as the Lecture Series; Architecture Graduate Student Association and Graduate Planning Student Association-sponsored lectures; faculty-supported conferences and lectures; the SAP commencement; and off-site events (e.g, lectures at the Darwin Martin House Complex, Albright Knox Art Gallery, etc.). These recordings are part of the ongoing effort to grow and develop the VRC collection. In addition to curatorial duties, the VRC provides faculty support in fulfilling requests for new images, digitizing analog images for projection or publication, and converting VHS tapes to DVD or other digital formats. The VRC also supplies slide and video projectors for SAP students and staff, TV monitor with VHS/DVD player or digital projector for non-technology classrooms or studios, and has a flat-panel television for small groups of people to view videos or DVDs in the VRC proper. In recent years, the VRC has begun to increase the School's digital presence by making the Lecture Series available as downloadable video files to students, faculty, as well as architects and planners throughout the country via the School's website (<http://www.ap.buffalo.edu/sap/news/LectureRecordings.asp>). Additionally, UB students and faculty can now subscribe to a podcast, through which they can download both the current semester Lecture Series, as well as a selection of previous lectures. There are over 60 lectures

accessible via podcast through UB on iTunesU.

(https://itunes.buffalo.edu/public/reg_scripts/ub_itunesu.cgi).

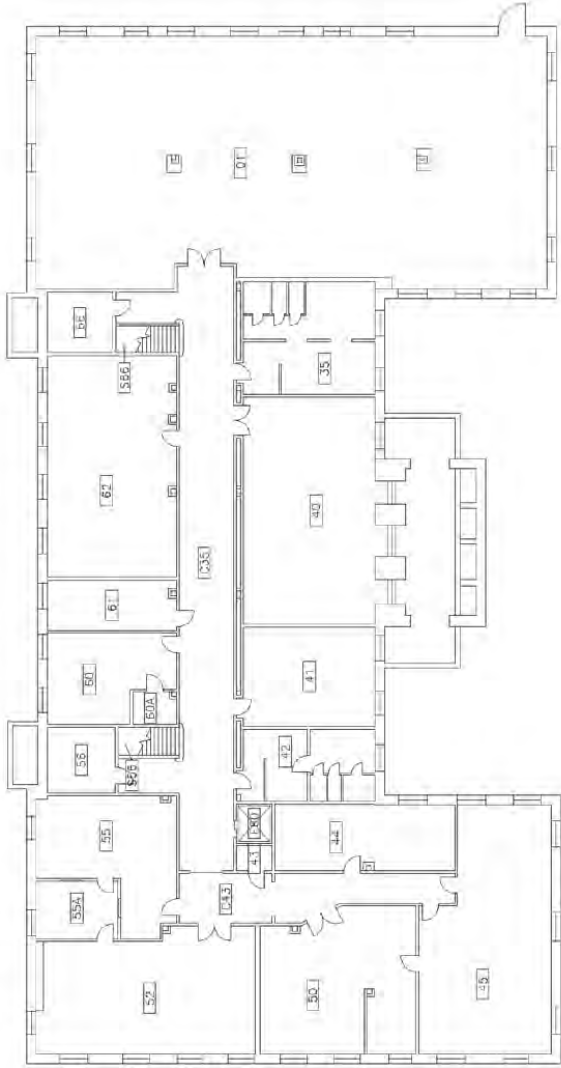
An in-house digital database has been under development and is undergoing modifications to make it available via the internet to the UB community.

Computing Resource Center and Ed Tech Classrooms

The University at Buffalo and the School of Architecture and Planning provides a robust computing infrastructure to support the program's goals and objectives. To start, over 95 computers, organized in 4 computing labs are available to students 24 hours a day. In addition to standard desktop applications, these high performance workstations come with a wide range of specialty products, including computer-aided design, spatial analysis tools, scenario modeling, rendering, statistical analysis packages and graphic design applications. All faculty and staff have dedicated computing access, with tailored hardware and software configurations to advance their research and work objectives. The school also features an enterprise level printing environment, with large format plotters, multi-function copiers, along with 3D printing capacity, all configured to meet the varying output needs of our faculty, staff and students. The recent acquisition of large format scanning and expanded availability of technology enabled classrooms, with large screen digital displays and high-definition wireless projectors are all part of the school's commitment to advance the Department of Architecture's teaching and academic mission.

The school's investment in computing and technology leverages and builds upon the rich infrastructure and resources made available by the university. From complete campus wide wireless coverage, to virtual computing labs and free software for personally owned computers, students and faculty can access UB software from any location. Dedicated email, robust file storage, wide support for mobile devices, safe computing guidelines and technical support are all part of the school and university service portfolio, to ensure students and faculty have the what they need for academic excellence.

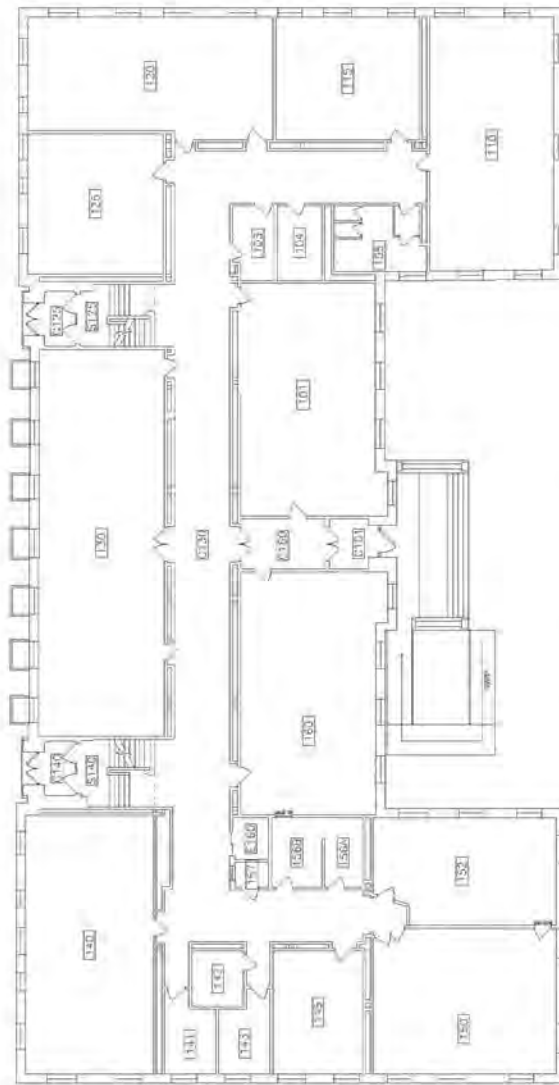
Crosby Hall Floor Basement



- | | | |
|--|--|-----------------|
| 1: Architecture EP/Solar
Decathlon Graduate Studio
Space (Wales) & Architecture
MC Graduate Studio Space
(Maher) | 43: Elevator Room
44: Communications Closet
45: Vacated for Rehab
50: Vacated for Rehab
52: Vacated for Rehab
55: Computing Lab
56: CIT Data Room
60: Maintenance
63: Mechanical | 66: Maintenance |
| 35: Men's Restroom
40: Computing Lab
41: Computing Lab
42: Women's Restroom | | |

8/15/2014

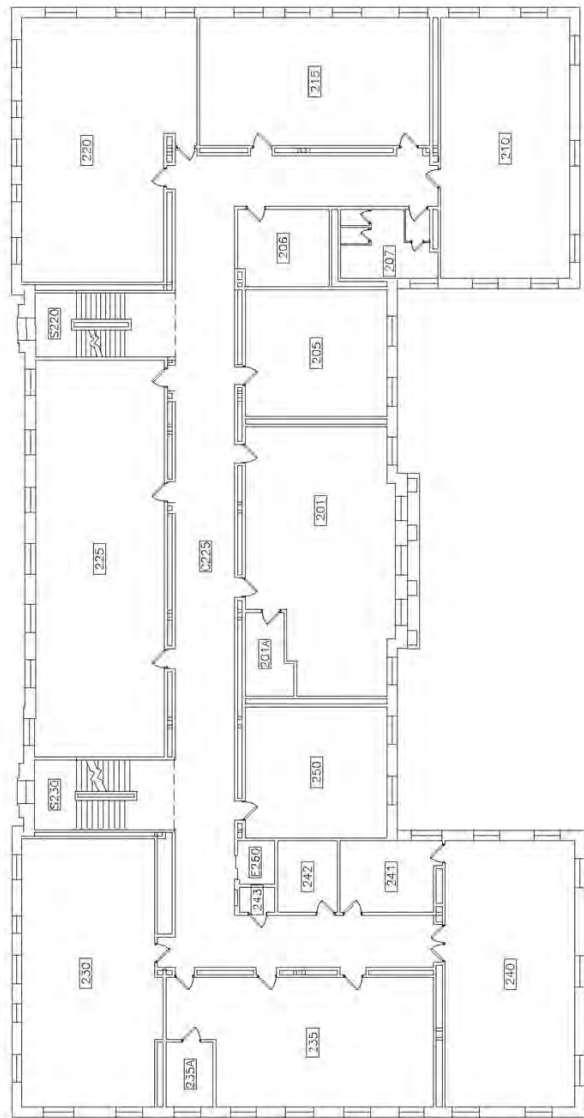
Crosby Hall Floor 1



- | | | | |
|---|--|--|--|
| 101: Print Lab | 125: Classroom | 145: Visual Resources Center, Marianne Schultz | 160: Architecture Sophomore Studio Space |
| 103: Resource Room | 130: Architecture Sophomore Studio Space (2) | 150: Directed Research Studio Space | |
| 104: Plaster Room | 140: Architecture Sophomore Studio Space | 152: Planning Graduate Studio Space (Hate) | |
| 105: Lavatory (CLOSED) | 141: Student Government | 156A: Data Room | |
| 110: Architecture 3.5 Year 1 Studio Space | 142: Visual Resources Center Imaging Room | 156B: Print Lab Storage | |
| 115: Classroom | 143: | 157: Maintenance | |
| 120: Architecture Sophomore Studio Space | | | |

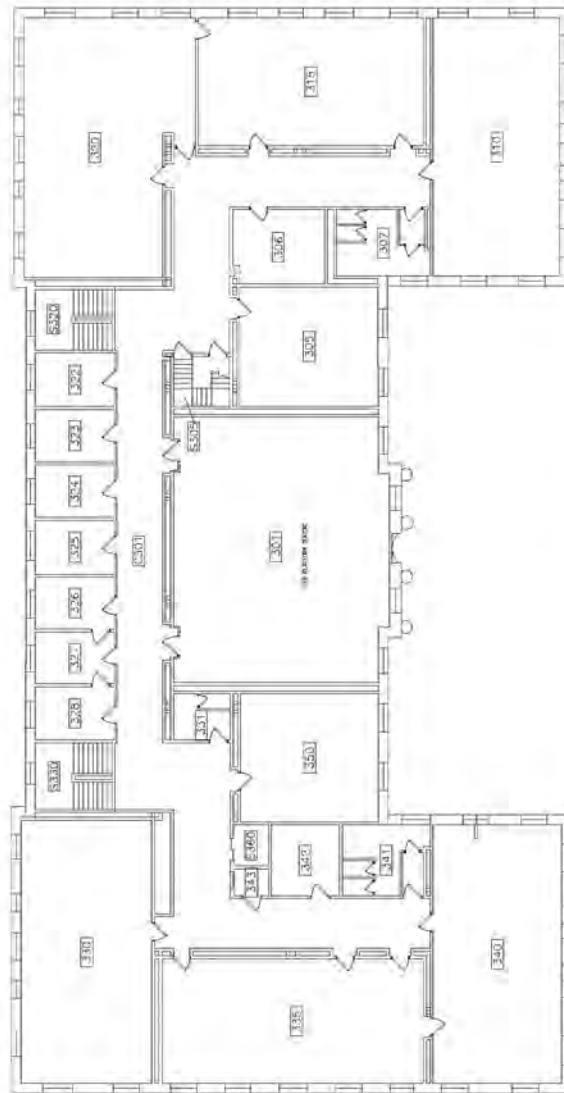
7/24/2014

Crosby Hall Floor 2



- | | | |
|--|---|---------------------|
| 201: Architecture Junior Studio Space | 225: Architecture Junior Studio Space (2) | 242: Data Room |
| 205: Critique Space | 230: Architecture Junior Studio Space | 243: Maintenance |
| 206: Spray Booth | 235: Architecture Junior Studio Space | 250: Critique Space |
| 207: Lavatory (CLOSED) | 240: Architecture Junior Studio Space | |
| 210: Option Studio Space | 241: | |
| 215: Comprehensive Studio Space | | |
| 220: Architecture ID Graduate Studio Space (Steinfeld) | | |

Crosby Hall Floor 3



- | | | | |
|---------------------------------------|---------------------------------------|--|---|
| 301: Classroom | 320: Architecture Senior Studio Space | 327: Stephenie Cramer & Virginia Melnyck | 340: Architecture EP Graduate Studio Space (Garofalo) |
| 305: Critique Space | 322: Matthew Hume & Karen Tashjian | 328: Greg Delaney & Miguel Guitart | 341: Women's Restroom |
| 306: Spray Booth | 323: Nicholas Bruscia | 330: Architecture Senior Studio Space | 342: Communications Closet |
| 307: Lavatory (CLOSED) | 324: Dennis Maher | 331: Men's Restroom | 343: Maintenance |
| 310: Architecture Senior Studio Space | 325: Brad Wales & Harry Warren | 335: Architecture ST Graduate Studio Space (Bruscia) | 350: Critique Space |
| 315: Architecture Senior Studio Space | 326: Christopher Romano | | |

1/24/2014

E. Parker Hall

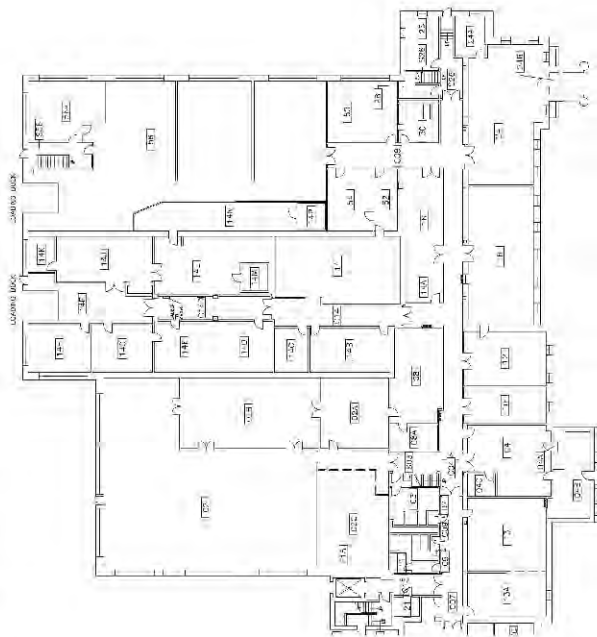
Freshman Studios and Support Space

Total studio space in Parker Hall is approximately 7,500 sq.ft.. All studios are outfitted with safety-compliant drop-box electrical outlets. A wet cell with a plaster trapped sink was installed and individual drafting tables are available for each freshman student. Studio doors are provided with mechanical locks to address after-hours safety concerns.

Materials and Method Shop and Digital Fabrication Lab

The Shop and Fab Lab occupy a 7,250 square foot, high bay facility that contains an extensive complement of hand and power tools for working with wood, metal, and plastic; workspace and layout tables; CNC routers, lasercutters and 3D Printers and a service center for purchasing commonly used materials. They are staffed by the shop director, one GA and 18 shop assistants; for safety reasons, the number of students allowed in is related to number of staff; one shop assistant for up to 20 students, two for 30 students, three for 40 students. Students are permitted in the shop at any given time on a first-come-first-served basis. The shop is used extensively by studio students at all levels of the program

Parker Hall Basement (selected)



- | | | |
|--|----------------------------|----------------------|
| 02: Materials and Methods Shop, Lindsay Romano & Peter Russell | 12: Shop Storage | 56: Studio Space |
| 02A: Digital Workshop | 16: Faculty Research Space | 56A: Freshmen Office |
| 08: Digital Workshop | 18: Studio Space | |
| | 24: Studio Space | |
| | 50: Faculty Research Space | |

9/15/2014

F. Health Sciences Library (HSL)/ Architecture and Planning Library

The Architecture and Planning Library (APL) is a branch of the University at Buffalo Arts & Sciences Libraries (ASL). APL is temporarily located in the Health Sciences Library (HSL) in Abbott Hall, while the permanent location in Hayes Hall is being renovated. APL supports the instructional programs of the School of Architecture and Planning through its collections, staff, and services. The APL collection currently exceeds 19,000* volumes and maintains subscriptions to approximately 175 serials. Departmental needs are also supported by the University Libraries, which contain over 3.6 million volumes, in addition to media and special collections, both hard copy and digital. The Libraries subscribe to over 350 bibliographic and full-text databases and more than 10,000 electronic journals. Cybaries (computing sites) in several University Libraries locations provide access to more than 500 computer workstations.

APL's reference, theses and book collection; bound and current periodicals and eight computer workstations are located on the 3rd floor of Abbott Hall within the Health Sciences Library. In addition, there are reading tables and chairs, individual student study carrels and a reference desk located on the 3rd floor. Assistance may be required for some monographic and non-book materials due to excessive use and faculty requests. These items are labeled as controlled circulation and reserve collections and are available at the HSL Circulation Desk on the 1st floor of Abbott Hall. The APL multimedia browsable collection is also located on the 1st floor of Abbott Hall.

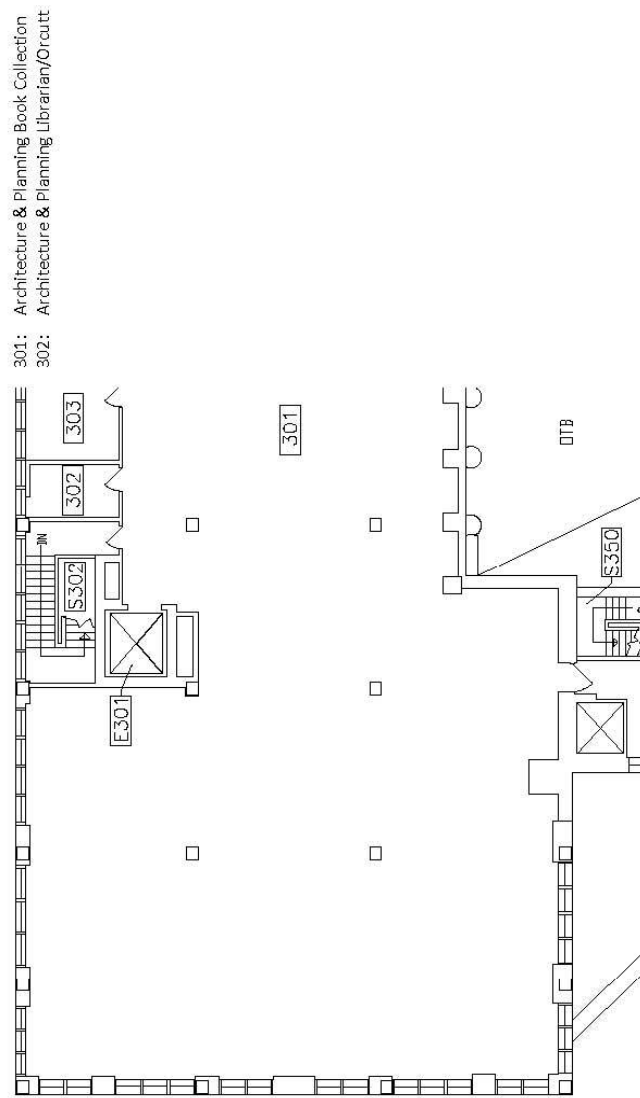
APL is open to all users the same hours as HSL; 97 hours/week during Fall and Spring semesters, and 75 hours/week during summer sessions (excluding special holiday and intersession hours.)

The advantage of APL being housed temporarily in the Health Sciences Library allows students the use of additional computers and wireless services that are located throughout Abbott Hall for laptop use. The hours of operation are longer.

***Number of volumes:**

The APL book collection exceeds 19,000 volumes, or 2,675 linear feet of stacks. In anticipation of the move to Abbott Hall (HSL), 15,000 volumes of low-use books, journals and theses were transferred to the Libraries Annex. While student and faculty needs for research materials are usually met within the APL, some materials or extra copies of publications are shelved in other University Libraries and the Libraries Annex. By using the highly effective Delivery+ system, users can request that books as well as articles from journals shelved at libraries on the North Campus and the Annex (Libraries Storage) across from the North Campus. These materials will be delivered to them within 24 hours. Books are delivered in hard copy and journal articles via email using the speedy and popular Delivery+ service.

APL Library - Abbott 3rd Floor (Selected)



1.2.4. Financial Resources

A. Financial Base

The School's Financial Base is composed as follows (given for 2013/14):

State Funds	\$6.10 Million
Student Fees	\$0.25 Million
Endowments	\$0.86 Million
Total:	\$7.21 Million

State funds are allocated to the School by the Provost and relate to specific undergraduate and graduate enrollment targets. Funds for the Department of Architecture are allocated by the Dean of the School of Architecture and Planning. The Department of Architecture's budget is allocated to the following categories in the amounts indicated (given for 2014/15 – 2016/17 as of July 30, 2014):

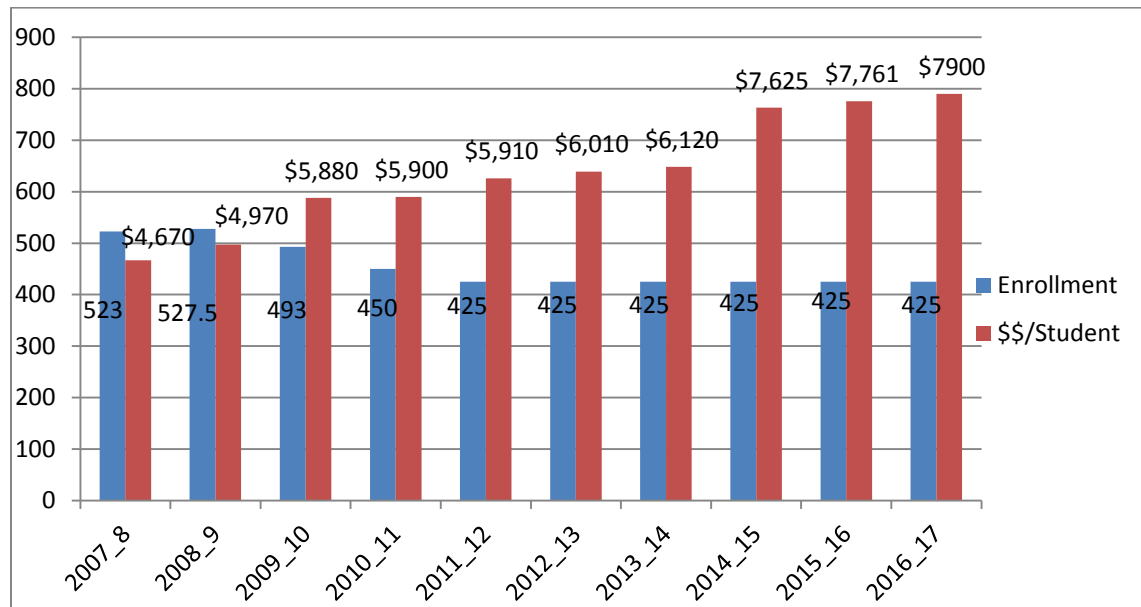
Architecture Base:	2014/15	2015/16(proj.)	2016/17(proj.)
Personnel	\$2,764,717	\$2,820,011	\$2,876,412
TA/GA	\$129,994	\$132,594	\$135,246
Operations	\$60,715	\$60,715	\$60,715
Recruitment/Admissions	\$16,050	\$16,050	\$16,050
Critics	\$4,000	\$4,000	\$4,000
Fellowship	\$1,400	\$1,400	\$1,400
VRC Operations	\$3,000	\$3,000	\$3,000
Clarkson Visiting Chair	\$6,000	\$6,000	\$6,000
Lecture Series	\$22,900	\$22,900	\$22,900
Tuition Scholarships (Base)	\$86,863	\$86,863	\$86,863
Recruitment Scholarships	\$80,000	\$80,000	\$80,000
Junior Faculty Support	\$25,000	\$25,000	\$25,000
Scholarships (above base)	\$40,000	\$40,000	\$40,000
Total	\$3,240,639	\$3,298,533	\$3,357,585
Program Enrollment	425 total	425 total	425 total
Budget Dollars/Student	\$7,625	\$7,761	\$7,900

Budget Notes:

When comparing this base to previous accreditation reviews, please note that the Architecture graduate and undergraduate program enrollments, with the full support of the Provost, were intentionally reduced. Undergraduate enrollment was reduced from 394 to 320 and graduate enrollment was reduced from 124 to 105 – this represents a significant increase in resources within the department's financial base. In the 2007/8 Architecture Budget, the dollars per student was \$4,653 and in the 2014/15 budget the dollars per student increases to \$7,625 - an increase of \$2,972/student.

Several school-wide meetings were held where all aspects of School finances, facilities plans and administrative processes were presented and discussed. Three school-wide retreats were held (February 9, 2011, October 1, 2012 and March 10, 2014) to engage faculty and staff in a review of school mission/vision, challenges, revenue generation opportunities and current needs. There was overwhelming support for an enhanced research infrastructure to support current and future faculty scholarship and research. To that end the School engaged senior leadership in a plan to acquire the full

capacities of the UB Regional Institute. On July 1, 2011 the UB Regional Institute was transferred to the School of Architecture and Planning and will now serve to support faculty scholarship and research. The Regional Institute comes with a diverse range of capacities and is a partnership of support between the School and UB. Research productivity has nearly tripled in the school from ~\$1.2M/year to over \$3.6M/year.



B. Endowments and Scholarships:

The School's principal endowments are:

- The Brunkow Fellowship (requires department to provide full TAsip and fund increases this by \$4,000/yr for two students)
- The Cannon Design Publication Fund (*Intersight* Publication Support)
- Friends of the School (support for School-wide Initiatives)
- The Pearce Visiting Critic (supports annual critic visits for the Department of Architecture)
- The Clarkson Visiting Chair (supports a one week residency, lecture, and studio instruction)
- The Buckminster Fuller Fund (student scholarship fund)
- Cannon Design Graduate Scholarship (one year tuition support plus internship)
- The Robert J. Stoll Scholarship Fund (tuition support)
- The Dean's Graduate Student Scholarship Fund (tuition support)
- The Phyllis Euker Architecture Travel Fund (student travel scholarship support)
- The Sydney Gross Memorial Fund (tuition and lecture support)

The School distributes over \$185,828 in tuition waiver scholarships annually, with \$86,863 allocated to architecture students. Tuition waivers are allocated based on merit.

1.2.5. Informational Resources

A. Library Collections

Context:

The Architecture and Planning Library (APL) is a branch of the University at Buffalo Arts & Sciences Libraries (ASL) <<http://library.buffalo.edu/>>. APL is temporarily located in the Health Sciences Library in Abbott Hall while the permanent location in Hayes Hall is being renovated. APL supports the instructional programs of the School of Architecture and Planning through its collections, staff, and services. The APL collection currently exceeds 19,000* volumes and maintains subscriptions to approximately 175 serials. Departmental needs are also supported by the University Libraries, which contain over 3.6 million volumes in addition to media and special collections, both hard copy and digital. In addition, the Libraries subscribe to over 350 bibliographic and full-text databases and more than 10,000 electronic journals. Cybraries (computing sites) in several University Libraries locations provide access to more than 500 computer workstations.

Funding:

Budget allocations are assigned from centralized University Libraries funding. The central library funds supplement subject allocations by supporting the purchase of a broad range of multidisciplinary databases such as *ARTstor*, the image database, and *JSTOR*, a digital archive and full-text database offering complete backfiles of important scholarly journals. Specialized and large aggregate database resources which offer e-versions of recent issues of such journals as *Architectural Record*, *Architectural Design*, *Architectural History*, and the *Journal of the Society of Architectural Historians* are centrally supported and greatly enhance the APL monographic and serial fund allocations.

The APL librarian is responsible for the selection of monographic and serial acquisitions, and also makes recommendations for subscriptions to online databases and digital collections. The APL budget and system-wide electronic purchases are overseen by the Director of Collections for the University Libraries. Selected non-print materials (CD-ROMs, video, audio, and digital image collections) are also acquired with APL funds; additional visual resources are acquired by the School of Architecture and Planning Visual Resources Center.

Subject coverage:

Library materials are acquired in support of all curricular areas with attention to faculty research interests. Architecture and Planning materials strongly emphasize the topics of: building types; new and innovative materials; vernacular American architecture; twentieth- and twenty-first century architecture; architectural theory and criticism; drawing and design; architectural technologies and new/innovative materials; architectural photography; architecture as a profession; barrier-free/accessible architecture (universal design); computer-aided design; green design, including solar and alternative energy design and utilization; sustainable landscape and ecological urbanism; historic building preservation and restoration; digital architecture; and adaptive re-use.

APL also places emphasis on acquiring materials related to Buffalo and the Western New York region. The "Buffalo Collection" is a controlled circulation collection that includes books, reports, blueprints, and ephemera related to the architecture and regional planning interests of the Department. Materials on pre-eminent architects with extant works in the region are also emphasized. Examples include Frank Lloyd Wright, H.H. Richardson, Frederick Law Olmsted, Louis Sullivan, and others.

Supporting collections are also housed in other University Libraries. Most notably, the University Archives <<http://library.buffalo.edu/archives/>> houses the Frank Lloyd Wright (FLW) Collections which contain

extensive materials about Frank Lloyd Wright's work in Buffalo. Plans, drawings, photographs, the contractor's letter book, oral histories, and much correspondence between Frank Lloyd Wright and Darwin Martin related to the design and construction of the Darwin D. Martin House, reputed to be the best documented of FLW's residential structures, are available. Also included in the Archives are materials on Wright's Graycliff, the Larkin Company Administration Building, and other Wright-related materials. Additional architectural information is in the Oscar A. Silverman Library (new and innovative materials, maps, standards), Lockwood Memorial Library (architectural history, design, social sciences, urban and community studies, business and real estate, government documents), and the Law Library (building, zoning, and land use codes and regulations). Other architectural archival materials such as selected plans and drawings produced by the School's architecture students and ephemera concerning Architecture Department history are now held at the University Archives.

Levels of coverage:

APL maintains an advanced study level of coverage for most areas. Adapted from the *Guidelines for Collection Development* (Perkins, 1979), the collection is adequate to support the course work of advanced undergraduate and master's degree programs or sustained independent study. Areas of strength include twentieth-century architecture, individual architects, architectural history and criticism, building types, planning, and urbanization.

*Number of volumes:

The APL book collection exceeds 19,000 volumes, or 2,675 linear feet of stacks, shelved in a book collection, reference collection, oversize books, and the School of Architecture and Planning Theses Collection. In anticipation of the move to Abbott Hall (HSL), 15,000 volumes of low-use books, journals and theses were transferred to the Libraries Annex. While student and faculty needs for research materials are usually met within the APL, some materials or extra copies of publications are shelved in other University Libraries and the Libraries Annex. By using the highly effective ILLIAD system, users can request that books as well as articles from journals shelved at libraries on the North Campus and at the Libraries Annex near the North Campus. These materials are delivered within 24 hours of the request. Books are delivered in hard copy and journal articles are sent via email using the speedy and popular Document Express service.

Serials:

APL currently maintains subscriptions to over 175 serials. When compared to the AASL (Association of Architecture School Librarians) *Core List of Periodical Titles for a First-degree Program in Architecture* <<http://www.architecturelibrarians.org/corelist1.html>>, APL owns 92% of the *Core List* titles and maintains current subscriptions to 86% of the *Core List* titles.

APL provides indexing access to the periodical literature via the *Avery Index to Architectural Periodicals* (print and online), *Compendex Plus*, *Art Abstracts*, and *Art Index Retrospective* (print and online). Additionally, the University Libraries have access to the online full-text of many architectural journals, article abstracts, and e-books through numerous interdisciplinary electronic products, including *JSTOR*, *Project Muse*, *Academic Search Premier*, *MasterFILE Premier*, *PAIS International Online*, *Social Sciences Citation Index*, *Arts and Humanities Citation Index*, *IngentaConnect*, and *EBook Library (EBL)*. These electronic products are all centrally-subscribed and available to both onsite and remote users. The full list of electronic resources is available through the *Databases* page of the University Libraries <<http://library.buffalo.edu/libraries/findlibrarymaterials/databases/>>.

Visual resources and non-book materials:

The Visual Resource Center (VRC) is a separately administered collection within the School of Architecture and Planning. The collection includes over 30,000 slides, 500 videos, and 14,000 digital

images. The VRC is staffed by a full-time Director and a part-time student assistant. VRC collection development is supported by the VRC Director, the Department of Architecture faculty, and the APL librarian. A \$2,000 annual budget is allocated from the Architecture Department for new acquisitions and collection maintenance.

In addition to audiovisual materials in the VRC, APL also collects many non-book materials. The APL collection includes microfilm, microfiche, videos, CD-ROMs, and DVDs. A small collection of architectural drawings, including some renderings and blueline document sets for campus buildings, Buffalo-area buildings, and selected archival materials of architectural significance is now cataloged and located in the University Archives. Online digital collections include:

- The *Universal Design Product Collection*, IDEA Center, School of Architecture and Planning <http://ubdigit.buffalo.edu/collections/sap/sap001_UnivDesign.php>, digitized and produced by the University Libraries. This collection is comprised of over 200 universally designed products and environments from a traveling exhibit titled “live | work | eat | play.”
- The *Rudy Bruner Award for Urban Excellence Digital Archive* (RBDA) <<http://ublib.buffalo.edu/libraries/e-resources/bruner.html>> has been developed and maintained by the APL librarian with support from the University Libraries in partnership with the Rudy Bruner Foundation and the Urban Design Project of the School of Architecture and Planning. The RBDA contains full online records and documentation for Bruner Award winners since 1987.
- The *Digital Sanborn Maps (1867-1970) (New York State)* <<http://libweb.lib.buffalo.edu/pdp/index.asp?ID=124>> provide electronic access to more than 660,000 Sanborn fire insurance maps of approximately 12,000 American towns and cities. The maps are valuable tools for urban specialists, social historians, architects, geographers, genealogists, local historians, planners, and environmentalists.
- William S. Huff Photographs of the Work of Louis Kahn, University Libraries, University Archives <http://ubdigit.buffalo.edu/collections/lib/lib-ua/lib-ua003_HuffPhotos.php> William S. Huff is Professor Emeritus of Architecture at the University at Buffalo. The collection contains William S. Huff’s photographs of selected works of the American architect Louis I. Kahn (1901-1974). Among the projects featured in the collection are the Yale Art Gallery (1951); the First Unitarian Church of Rochester, New York (1959); and the Yale Center for British Art (1969).

Cataloging and Processing

APL materials are acquired, cataloged, and processed by Central Technical Services (CTS) of the University Libraries. Materials are cataloged and shelved using the Library of Congress classification system. Access is provided via BISON, the UB Libraries’ online catalog <<http://bison.buffalo.edu/>>. All records comply with MARC and AACR2 national standards. CTS is a participating member of the Program for Cooperative Cataloging (PCC) and its monographic bibliographic record (BIBCO) and name authority components (NACO) project. CTS is a founding member of the Cooperative Online Resource Catalog (CORC) project, and as part of CORC participation uses Dublin Core metatags to create records for electronic resources.

Conservation and Preservation

The University Libraries Preservation Department is responsible for preservation, conservation, and reformatting of library materials. APL staff regularly inspects the collection for materials in need of repair. Requests for material remediation are filled immediately. Limited closed stack facilities are available for fragile, valuable, and archival materials within APL, remotely at the Libraries Annex, and also in the University Archives.

B. Library Services

Reference

Onsite professional reference service is provided in person at APL as well as at other University Libraries' Reference/Information desks. Reference service is also available via email, phone, online chat, and text <<http://library.buffalo.edu/askalibrarian/>>. The Reference, Information, and Instructional Services Policy Statement of the Arts & Sciences Libraries <<http://library.buffalo.edu/libraries/asl/services/reference-policy.html>> govern APL services. All reference, instructional, outreach, and web services are overseen by the Director of Public Services & the Arts & Sciences Libraries of the University Libraries. APL maintains a print reference collection that is supplemented by system-wide online resources. Online general reference assistance and tools are provided through the *Research Tips* tutorial <<http://library.buffalo.edu/help/research-tips>>, *Best Basic Resources* <<http://library.buffalo.edu/libraries/findlibrarymaterials/databases/bestbasicresources.html>>, and *Subject guides* <<http://libweb1.lib.buffalo.edu/infotree/resourcesbysubject.asp?subject=Architecture>> on print and online sources in Architecture such as *Avery Index to Architectural Periodicals* and the *Grove Dictionary of Art Online*.

Bibliographic instruction

Achievement of information literacy competencies among School of Architecture and Planning constituents is a primary goal of the University Libraries. The APL librarian provides library workshops and tours during orientation week and teaches numerous course-integrated instruction sessions throughout the year through collaboration with Architecture faculty. For example, the librarian regularly presents at freshman orientation and studio classes each year, as well as at ARC 201: Design Studio; ARC 698: Thesis Prep; and ARC 596: Special Topics: Methods of Gathering Information. Other instruction has included research workshops for adjunct faculty and the many one-on-one reference consultations that students seek throughout the year when they are involved in individual research. Each one of these encounters is an ideal instruction opportunity. Research guides are prepared and distributed for all formal instruction sessions. Library instruction sessions are designed to relate to specified course content and to relevant standards and performance indicators of the ACRL Information Literacy Competency Standards for Higher Education <<http://www.ala.org/ala/mgrps/divs/acrl/standards/standards.pdf>> and are also guided by the Art Libraries Society of North America (ARLIS/NA) Information Competencies for Students in Design Disciplines <<http://www.arlisna.org/publications/arlis-na-research-reports/148-information-competencies-for-students-in-design-disciplines>>.

Access to collections

APL provides barrier-free access to its facilities and to the majority of its collection. Assistance may be required for some monographic and non-book materials due to limitations in the physical arrangement. Reserve collections are available at the HSL Circulation Desk (Abbott Hall) for monographic and non-print materials, and online through the University Libraries Course Reserve system for all other materials <http://bison.buffalo.edu:8991/F/?func=find-b-0&local_base=UBRSV>. The electronic reserve system is available 24 hours/day. The APL Reserve collection is accessible during regular hours of operation. Reserve materials, in general, are circulated to users for two-hour in-library use. Special accommodations for extended use or out-of-library circulation are considered by request to the APL Librarian.

Circulation

Library materials circulate to the School's students for a four-week loan, and to faculty for 16-week loan. The "My Account" feature in the Catalog <<http://library.buffalo.edu/myaccount>> allows individual users to

check the books they have out and their due dates, and to also initiate renewals, recalls, or requests for books and other library materials. Additional circulation services allow users to request delivery of materials from other campus libraries to APL via UB Document Express or from libraries around the world via Delivery+ (interlibrary loan). Circulation services are detailed at <<http://library.buffalo.edu/delivery>>.

Convenience

APL is open to all users the same hours as the Health Sciences Library -- 97 hours/week during Fall and Spring semesters and 75 hours/week during summer sessions (excluding special holiday and intersession hours). Hours are posted in APL, distributed in print to all students and faculty, and posted on the Libraries' website <<http://library.buffalo.edu/hours/>>.

Current awareness

New acquisitions are listed on the Libraries' *New Additions* site <http://bison.buffalo.edu:8991/buf_new_additions.html>. Notices include acquisitions of new databases, books, periodicals, and special collections in APL and all the University Libraries. The APL Librarian also sends out frequent alerts to the Architecture and Planning faculty listserv and consistently updates the architecture blog of new articles, books, websites, and happenings of architectural interest. These frequent alerts and updates are excellent mechanisms for encouraging communication between the librarian and the faculty, often prompting faculty to reply to the alerts with a request for a book or to mention other issues concerning the library which otherwise might not have been addressed. In addition, the Libraries provide several current awareness services of interest to Architecture faculty through vendor products. Additional library research services are described on the *Get Help* page <<http://library.buffalo.edu/help/>>.

Cooperative agreements

The UB Libraries participate in a variety of consortial agreements for interlibrary loan. Our priority agreement is with Empire Express, which includes SUNY Binghamton, SUNY Stony Brook, SUNY Albany, and Syracuse University. These institutions agree to electronic delivery of all photocopied materials and UPS courier services for returnable materials. Additionally, we have cooperative loan agreements with Western New York Library Resources Council (WNYLRC) members and reciprocal arrangements with 15 other Association of Research Libraries (ARL) institutions. Interlibrary loan request forms are available online <<http://library.buffalo.edu/delivery>>.

C. Library Staff

APL staff members are employees of the University Libraries and report to the Director of Access Services or the Director of Public Services & Arts & Sciences Libraries for the University Libraries. The Architecture and Planning Librarian is the official liaison between the University Libraries and the Department. The librarian maintains collegial relationships with the Department of Architecture faculty and the School of Architecture and Planning leadership. The librarian also regularly attends Departmental and School-wide meetings, and consults regularly with faculty, including working closely with faculty in support of their research and in the development of instruction, writing, and teaching.

Professional status

APL is staffed by one professional librarian, Rose Orcutt, who provides .96 FTE service for the calendar year and one full-time library clerk during regular open hours. Support services and student assistants are shared with the Health Sciences Library to provide centralized services, and backup to the librarian is provided by other librarians in the Arts & Sciences Libraries.

Support staff

The APL Library Clerk 1 has served the University Libraries since 1985 in progressively responsible positions. Christine Doze reports to the Director of Access Services, and receives regular in-service training through that unit. The Clerk is responsible for all of the Library's Access Services operations. Regular duties include overseeing circulation, course reserves, stack maintenance, and student training. In addition to her APL responsibilities, the clerk represents APL on the School of Architecture and Planning Emergency Response Team.

Professional development

All library faculty and staff are eligible to apply for professional leave and institutional support for attendance at training opportunities and professional conferences.

Salaries

Staff salaries are reviewed and equalized by the University Libraries Human Resources Officer, and are in compliance with United University Professions (UUP) guidelines.

D. Library Facilities

Space

Hayes Hall is still undergoing renovations that began in the summer of 2011 to meet the current safety and infrastructure codes. The renovations of Hayes Hall are expected to be completed in 2015. It is uncertain whether APL will return to its original location in Hayes Hall. In the meantime, APL is currently housed on the 3rd floor of the Health Sciences Library in Abbott Hall. Because of the limited teaching facilities available within Abbott Hall, the librarian makes frequent use of Departmental instructional facilities in Diefendorf Hall, Crosby Hall and Hayes Annexes.

Equipment & Furnishings:

The University Libraries' large off-site storage facility, the Libraries Annex, was in the planning stages in 2002 and opened its doors in 2006. As a result of the move to Abbott Hall, APL has transferred materials offsite to the Libraries Annex. The Libraries Delivery+ service has been augmented to provide efficient and speedy shuttle delivery of materials from the Libraries Annex to APL.

The location of APL in the Health Sciences Library has some advantages for students and faculty, including increased hours and the large number of computers available throughout the building. Computers, printers, and scanners are available to users during regular hours of operation. Network drops and wireless communications are located throughout Abbott Hall for laptop use. Staff and public equipment are continuously upgraded for both hardware and current versions of needed software by University Libraries Information Technology (ULIT) staff and Computing and Information Technology (CIT) of the University. Ethernet drops and all public workstations are maintained by CIT. Technical support for staff computers is provided by the University Libraries.

APL multimedia materials are housed behind the Circulation desk and the browsable DVD collection is located on the first floor of Abbott Hall. Streaming video service is also available to faculty and students through our Digital Campus: <http://library.buffalo.edu/multimedia/instructors/digitalcampus.php>. Onsite VHS, DVD, CD-ROM viewing equipment is available in the three viewing rooms located in the basement quiet study area and can be signed out by students and faculty at the Circulation desk.

Security

University Facilities conducts annual checks on the fire protection equipment. The APL Clerk participates in the SAP Emergency Response Team. The librarian and clerk regularly review the Libraries Disaster Preparedness documents and supplies.

E. Library Expenditures

Library Collections Expenditures

Types of Collections	Expenditures Budget Year 2011-2012	Expenditures Budget Year 2012-2013	Expenditures Budget Year 2013-2014
Books	\$15,792	\$15,000	\$14,773
Periodicals	\$15,858	\$23,000	\$35,083
Other Serials	\$4,126	\$3,035	\$2,483
Total	\$35,776	\$41,035	\$52,339

*additional funding obtained from 'Special Funds' within the University Libraries

Library Staff Expenditures

Types of Positions	Expenditures Budget Year 2011-2012	Expenditures Budget Year 2012-2013	Expenditures Budget Year 2013-2014
Librarian (.80 FTE)	\$0	\$0	\$0
Librarian (.96 FTE)	\$53,725	\$53,725	\$54,205
Paraprofessionals	\$0	\$0	\$0
Clerk	\$36,973	\$36,973	\$40,437
Students	\$15,000	\$15,000	\$15,000
Volunteers	\$0	\$0	\$0
Total	\$105,698	\$105,698	\$111,142

1.3. Institutional Characteristics

1.3.1. Statistical Reports

Program Student Characteristics

Fall 2013 M.Architecture Total Enrollment: **119**

Fall 2013 M. Architecture enrollment in NAAB-accredited program by race/ethnicity, gender and full/part-time status

	MALE		FEMALE		TOTAL		GRAND TOTAL
	full-time	part-time	full-time	part-time	full-time	part-time	
Native American or Alaska Native	0	0	0	0	0	0	0
Asian or other Pacific Islander	4	1	3	1	7	2	9
Black or African American	1	0	1	0	2	0	2
Hispanic/Latino	3	0	0	0	3	0	3
White	47	3	15	1	62	4	66
Two or more races	0	0	1	0	1	0	1
Non-Resident Alien	11	0	14	0	25	0	25
Race and ethnicity unknown	5	0	6	2	11	2	13
TOTAL	71	4	40	4	111	8	119

Fall 2013 University at Buffalo graduate school (excludes professional schools) enrollment by race/ethnicity, gender and full/part-time status

	MALE		FEMALE		TOTAL		GRAND TOTAL
	full-time	part-time	full-time	part-time	full-time	part-time	
Native American or Alaska Native	9	7	8	14	17	21	38
Asian or other Pacific Islander	65	43	61	62	126	105	231
Black or African American	63	42	84	83	147	125	272
Hispanic/Latino	22	26	42	47	64	73	137

White	745	693	1045	951	1790	1644	3434
Two or more races	12	4	19	5	31	9	40
Non-Resident Alien	1394	619	816	362	2210	981	3191
Race and ethnicity unknown	123	152	183	186	306	338	644
TOTAL	2424	1579	2250	1696	4674	3275	7949

Fall 2014 University at Buffalo M. Architecture Test Scores and Undergraduate Grade Point Average¹⁷

	GPA	GRE Verbal	GRE Quantitative	GRE Analytic
# of data elements	48	50	50	50
Fall 2013	3.25	147	153	3.26

Accredited M. Arch. Program Completion Rates Since Last Visit ¹

program	graduating class	100%	150%	notes
2 year	AY 2013 - 2014	81%	n/a	2
	AY 2012 - 2013	79%	95%	2
	AY 2011 - 2012	91%	100%	

program	graduating class	100%	150%	notes
3.5 year	AY 2013 - 2014	77%	85%	2
	AY 2012 - 2013	69%	69%	2
	AY 2011 - 2012	67%	92%	2

Notes:

1: Includes statistics for single majors only and excludes students that left the program due to personal, financial or academic reasons.

2: 150% time frame is still in process so figures are not yet finalized.

¹⁷ Source: Access Recruitment database with queries (prefaced by NAAB) to extract data for students reporting GRE results and students with GPAs based on a 4.0 scale.

Program Faculty Characteristics

Fall 2013 Department of Architecture by race/ethnicity

	MALE		FEMALE		TOTAL		GRAND TOTAL
	full-time	part-time	full-time	part-time	full-time	part-time	
Native American or Alaska Native	0	0	0	0	0	0	0
Asian or other Pacific Islander	3	1	1	0	4	1	5
Black or African American	0	0	0	0	0	0	0
Hispanic/Latino	0	0	1	0	1	0	1
White	13	12	10	6	23	18	41
Two or more races	0	0	0	0	0	0	0
Non-Resident Alien	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0
TOTAL	16	13	12	6	28	19	47

Faculty Promotions

	2011 – 12	2012 – 13	2013 - 14
University at Buffalo	24	18	25
Buffalo Architecture	0	0	0

Faculty Tenure

	2011 – 12	2012 – 13	2013 - 14
University at Buffalo	47	54	56
Buffalo Architecture	1 ¹⁸	1	1

Faculty Licensure for ladder and qualified faculty in the Department of Architecture as of fall 2013

Location	Number	Locations of Licensure
US	9	New York, New Jersey, Massachusetts, Virginia
International	3	United Kingdom, Germany

1.3.2. Annual Reports

*Annual Reports and responses will be available in the Team Room.
See Part 4.8 for Annual Report Submission Statement of Accuracy*

¹⁸ Prof. Korydon Smith who was appointed with tenure.

1.3.3. Faculty Credentials

See Part 4.5 for Faculty Resumes and Faculty/Courses Matrix

I.4. Policy Review

The following Policies will be available in the Team Room for review by the visiting team.

Studio Culture Policy

- Studio Culture Policy
- Self-Assessment Policies and Objectives
- Personnel Policies
 - Position descriptions for all faculty and staff
 - Rank, Tenure, & Promotion
 - Reappointment
 - Diversity (including special hiring initiatives)
 - Faculty Development, including but not limited to; research, scholarship, creative activity, or sabbatical.
- Student-to-Faculty ratios for all components of the curriculum (i.e., studio, classroom/lecture, seminar)
- Square feet per student for space designated for studio-based learning
- Square feet per faculty member for space designated for support of all faculty activities and responsibilities
- Admission Policies/Requirements
- Advising Policies; including policies for evaluation of students admitted from preparatory or pre-professional programs where SPC are expected to have been met in educational experiences in non-accredited programs
- Policies on use and integration of digital media in architecture curriculum
- Policies on academic integrity for students (e.g., cheating and plagiarism)
- Policies on library and information resources collection development
- Grievance Policies

Part Two (2): Educational Outcomes and Curriculum

2.1. Student Performance Criteria

2.1.1. Overview of Program's Curricular Goals

The Department of Architecture is committed to the philosophy that architects have a role to play in the aesthetic, social and cultural betterment of society. Our education prepares students to see the full implications of what architecture does for the built environment by proposing future forms of habitation that are innovative in their aesthetic and cultural contribution. We teach our students that as architects they have a critical role to play in the progress of society by inspiring the social imagination and developing viable solutions to the pressing problem of the built environment. Their work will condition how we live, work and socialize. They will need to approach the task of design with great skill, vision and confidence knowing that the pressing questions of architecture have yet to find appropriate answers.

The curricular goals for the undergraduate Bachelor of Science in Architecture program are to *provide students with the concepts and skills necessary to pursue professional studies in architecture and educates students to be:*

- engaged in issues and methods of design inquiry, construction, representation and communication;
- culturally aware, technically competent, and environmentally responsible;
- sensitive to human needs and wants, and capable of translating these into design strategies and formal proposals.

The undergraduate curriculum is studio-centric, with studios required in seven of the eight undergraduate semesters coupled with a graduated mix of general education courses and supporting coursework in the major. The freshman studio sequence aims to provide students with basic literacy in design principles and fundamentals using two- and three- dimensional media, and to familiarize students with the tools, materials, techniques and values that enable and underscore design, making and thinking. In essence, students are introduced to a new mode of cognition.

Studio projects are organized around the theme of *Embodiment and Spatiality*. Freshmen also take two media courses, and two lecture courses that provide an introduction to architectural systems for evaluating the built environment, history and diversity of cultural experiences within the United States and their impact on the design professions, and non-western traditions in architecture.

The sophomore studios are organized around the theme Morphology and Context, and focus on developing creative approaches to integrating historical precedents and typology. The sophomore studios seek to expand the range of design methods and issues to include movement and temporality as design components, drawing and making as conceptual rather than exclusively representational tools, and problem-formulation as a creative act. Sophomores take additional coursework in Architectural History, World Civilization, Structures (1 of 2), and an Introduction to Building Technology, and Representation/Media.

The junior studio sequence develops concepts and practices of integrating Technologies and Systems. It presents an approach to design that examines how natural, social and material forces are mediated through building systems. Students are introduced to a variety of performative criteria that govern the workings of buildings in order to understand how dynamic forces like light, air, circulation and information contribute to the constructional, functional, and spatial formation of architecture. The spring semester studio is dedicated to a comprehensive building design project of medium scale that requires students to synthesize the complex issues involved in architectural design, with particular emphasis on site, climate,

and program as design forces. Students take the second structures course, their first environmental controls, a construction technology course, and Representation/Media during their junior year.

The senior fall semester studio focuses on the theme of Sociality and Culture, with students addressing urban housing as the studio project. Seniors also take coursework in architectural theory during the fall semester. The senior spring semester offers students the opportunity to work on a design competition in collaborative groups.

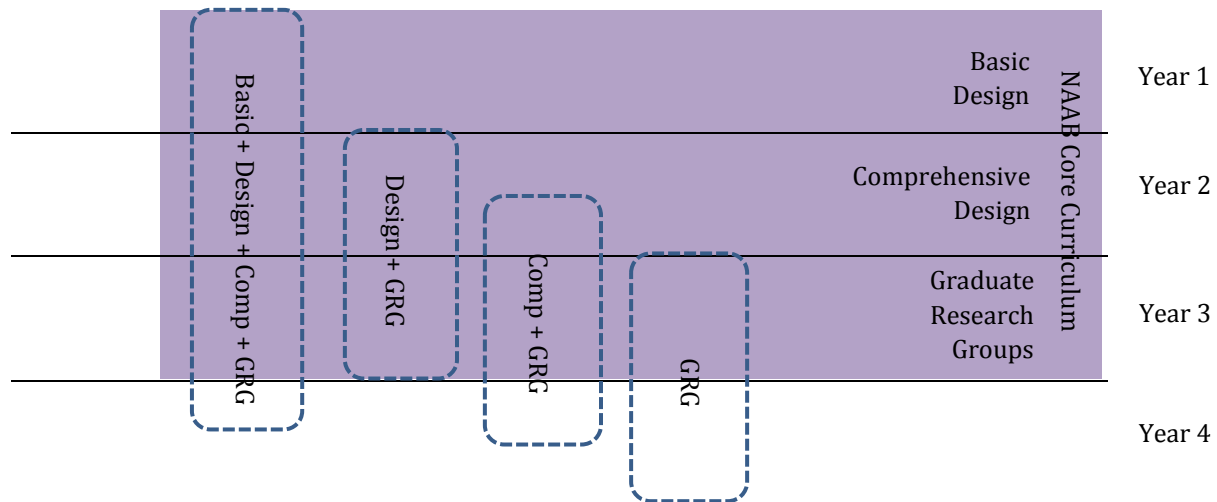
The curricular content for the undergraduate degree is shown in the degree matrix included in II.2.2.A. Relevant course descriptions are included in IV.1.1.

The curricular goals for the NAAB accredited graduate M.Arch program are to educate students to become architects in the most comprehensive sense and to prepare them to engage in the discipline and practice of architecture as well as other career fields related to the built environment. The graduate program seeks to refine, test and advance the skills and knowledge necessary for students to contribute to the profession and the public good. The graduate program mission includes the training and development of the next generation of architecture educators and researchers through involvement with and exposure to the research of the faculty. The M.Arch program prepares students to be:

- comprehensively educated in the discipline and practice of architecture;
- positive forces for the betterment of the built environment in the context of diverse clients, communities, and agencies;
- technologically, intellectually, culturally, and aesthetically equipped to contribute to the development of the discipline and practice of architecture.

The first four studios of the 3.5 year M.Arch track are roughly aligned with the 4-year BS. Arch undergraduate curriculum. The first studio focuses on principles of design and Embodiment and Spatiality; the second on Morphology and Context; the third on the integration of Sociality and Culture; and the fourth on Technology and Systems and comprehensive design. The first two semesters are an intense exposure to architectural methods, terms, techniques, and processes, including design fundamentals, methods, tools, and processes of design, making and thinking, coupled with coursework in architectural communications, architectural history and building technology. The next two semesters are coupled with coursework in structures, architectural communications, construction technology, environmental controls, professional practice, and architectural theory. The fifth and sixth studios are graduate level research based studios focused in four areas of concentration: *Inclusive Design*, *Ecological Practices*, *Material Culture*, and *Situated Technologies* coupled with coursework in advanced structures. Finally, in the seventh and last semester, the 3.5 year-track students enroll in a final graduate studio, or choose to undertake a thesis or a special project. Distributed over the seven-semester curriculum are electives in the four areas of concentration as well as open topic electives.

The curriculum of the 2-year M.Arch track is dependent on a student's undergraduate education. In the admission process the Department evaluates a student's educational and professional practice experience and maps that to our 3.5 year track to determine how much of the NAAB SPCs have been covered. Based on this, the student placed in one of three curricula: Architectural Design+ Graduate Research Groups; Comprehensive Design + Graduate Research Groups and Graduate Research Groups. The below graphic better explains the rationale for this as one curriculum cannot satisfy the variety of national and international students that apply to our program.



The 2yr track builds on the 3.5 year track with the addition four areas of concentration: *Inclusive Design*, *Ecological Practices*, *Material Culture*, and *Situated Technologies*. Students take required coursework in acoustics, lighting, advanced structures, and professional practice. Students also take required cognates in their area of concentration which provide them the theoretical and technical background to conduct research in those areas. Free electives are also part of the graduate curriculum. A thesis or a special project is broadly interpreted in the graduate program as an opportunity for students to explore a range of architectural issues through various vehicles; common to all theses is the student's demonstrated ability to independently structure an architectural research project with rigor and focus, and to communicate the work with precision and clarity to the graduate faculty.

The curricular content for both tracks of the graduate program is shown in the degree matrixes included in 2.2.2.B and 2.2.2.C. Relevant course descriptions are included in IV.1.1.

2.1.2. Graphic Matrixes

The following matrixes identify the courses responsible for delivering each of the required 32 student performance criteria.

		UNDERSTANDING										ABILITY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
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2.2. Curricular Framework

2.2.1. Regional Accreditation

A copy of the UB - MSCHE accreditation status 2004 can be found in Part 4.9.

2.2.2. Professional Degrees and Curriculum

The professional degree offered by the Department of Architecture is the Master of Architecture. It is awarded through two tracks: the 4+2 years track consisting of 4 years of undergraduate coursework leading to the B.S. in Architecture plus 2 years of graduate coursework leading to the M.Arch; and the 3.5 year track consisting of 3.5 years of graduate work for students holding a 4 year non-architecture undergraduate degree. Students in each of these degree tracks must meet all NAAB student performance criteria. The Department offers the following degrees, concentrations, and minors:

A. Bachelor of Science in Architecture Degree (B.S.)

The Department of Architecture offers one undergraduate degree, the pre-professional Bachelor of Science in Architecture. The pre-professional B.S. in Architecture program provides a multidisciplinary education designed to provide students with concepts and skills upon which professional studies at the graduate level may be based. Students matriculate into the pre-professional undergraduate major as freshmen, and the four-year undergraduate program structure was initially instituted in 1994. To be eligible for the B.S. in Architecture, students must satisfactorily complete a minimum of 128 credit hours of coursework as specified in the B.S. in Architecture degree matrix. Students track their program progress via an automated degree audit reporting system, known as the hUB Advisement Report which they may access through their hUB student center within the MyUB [<http://myub.buffalo.edu/>] portal. The hUB Advisement Report is the primary undergraduate academic advisement tool used for continuing students at the University at Buffalo. The Assistant Dean for Undergraduate Education is responsible for working with the Office of the Registrar to ensure accuracy within the hUB Advisement Reports, and the Undergraduate Academic Services unit utilizes the hUB Advisement Reports for academic advisement.

The undergraduate curriculum is subject to the New York State Education Department (NYSED), the State University of New York (SUNY), the University at Buffalo, and the Department of Architecture's standards, procedures, and requirements. General education requirements are mandated by the SUNY system and include topics such as Other World Civilization, Western Civilization, American Pluralism, Writing Skills, Math Skills, Arts, Social and Behavioral Science, and Natural Science, for example. Information literacy also required by the SUNY general education requirements are infused throughout general education courses. To be eligible for graduation, each undergraduate student must: 1) be formally accepted to the University at Buffalo; 2) be accepted to the pre-professional Bachelor of Science in Architecture; 3) satisfy all academic requirements, including a minimum of 128 semester credit hours; 4) satisfy Departmental curriculum requirements; 5) satisfy the UB/SUNY general education requirements; 6) maintain a minimum 2.0 cumulative University at Buffalo grade point average; 7) file an "Application for Degree" the Office of the Registrar through the hUB Student Center of MyUB; 8) be clear of all financial obligations and return all library materials. In addition to the University requirements, the Department of Architecture requires the completion of all required architecture, elective and general education courses listed on the B.S. in Architecture curriculum matrix, and a minimum of 128 semester credit hours with a GPA of 2.5 in all major (ARC-prefixed) courses.

The curriculum is structured to provide a range of academic material in a graduated mix with an increasing ratio of architecture coursework in the second and third years. Freshmen, sophomores and juniors complete studio each semester, and for seniors in the Fall semester only, complete a portfolio of

studio work at the culmination of each semester. Students are reviewed in the undergraduate pre-professional program by the Department of Architecture on an annual basis. This review determines the student's eligibility to continue onto the next level in the undergraduate pre-professional program. A minimum cumulative GPA of 2.5 in required architecture curricular courses is compulsory for academic degree requirements. At all undergraduate levels, a GPA of less than 2.5 for two consecutive semesters, or an "F" grade in any studio, are grounds for dismissal at the discretion of the Chair with consultation from the Assistant Dean for Undergraduate Education. See the curriculum matrix and credit hours distribution for the 4-year B.S. in Architecture on the following page.

Bachelor of Science in Architecture (BS Arch) Curriculum

Freshman Fall Semester

ARC101	Design Studio 1	5
ARC 111	Architecture Media 1	1
ARC121	Introduction to Architecture	3
UBE 101	Freshman Seminar or Cognate.....	1
ENG101	GE: Writing 1 *	3
	Or END 120 Introduction to Urban Environments*	
ULC 148	GE: College Trigonometry/Precalculus*.....	4
	Or MTH 121 Survey of Calculus 1*	
	Or MTH 131 Calculus for Management*	
Requirements	.....	17

Freshman Spring Semester

ARC 102	Design Studio 2.....	5
ARC 112	Architecture Media 2	1
ARC 211	GE: American Diversity & Design	3
ENG 201	GE: Writing 2 *	3
PHY 101/AP101	GE: College Physics 1*	4
	Or MTH 121: Survey of Calculus 1*	
	Or MTH 131 Calculus for Management*	
Requirements	.....	16

Sophomore Fall Semester

ARC201	Design Studio 3.....	6
ARC311	Architecture Media 3	1
ARC241	Introduction to Building Technology	3
ARC 231	Architecture History 1, Ancient - 1450.....	4
UGC xxx	GE: World Civilization 1 or General Elective.....	3
Requirements	.....	17

Sophomore Spring Semester

ARC 202	Design Studio 4.....	6
ARC 312	Architecture Media 4	1
ARC 352	Structures 1	3
ARC 234	Architecture History 2, 1450 - Present	4
UGC xxx	GE: World Civilization 2 or General Elective.....	3

Requirements 17

Junior Fall Semester

ARC301	Design Studio 5.....	6
ARC411	Architecture Media 5.....	1
ARC453	Structures 2.....	3
UAB xxx	GE: General Education or Elective.....	3
UAB xxx	GE: General Education or Elective.....	3
Requirements	.....	16

Junior Spring Semester

ARC 302	Design Studio 6.....	6
ARC 412	Architecture Media 6.....	1
ARC 442	Construction Technology.....	4
ARC 473	Environmental Controls 1.....	3
UAB xxx	GE: General Education or Elective.....	3
Requirements	.....	17

Senior Fall Semester

ARC 403	Design Studio 7.....	6
ARCxxx	Architectural Theory.....	2
ARC xxx	ARC Elective.....	3
UAB xxx	GE: General Education or Elective.....	3
Requirements	.....	14

Senior Spring Semester

ARC 404	Architecture Design Practicum - Proseminar.....	6
UAB xxx	GE: General Education or Elective.....	3
UAB xxx	GE: General Education or Elective.....	3
UAB xxx	GE: General Education or Elective.....	3
Requirements	.....	15

TOTAL REQUIREMENTS 128

Legend: *GE = University at Buffalo General Education Requirements*
 UAB xxx = University at Buffalo general education course or non-Architecture elective.
 UGC xxx =

** Placement determined on SAT/ACT/TOEFL scores and/or AP courses and/or IB higher level exams and/or completed collegiate courses. Students placed into ULC 148 for the Freshman Fall must complete MTH 121 or MTH 131 during the Freshman Spring. Students completing MTH 121 or MTH 131 during the Freshman Spring must complete College Physics during the Summer semester between the Freshman Spring and Sophomore Fall.*

B. Master of Architecture Degree (M.Arch): 3.5-year program

All graduate programs are subject to the State University of New York (SUNY), the University at Buffalo's Graduate School, and the Department of Architecture's standards, procedures and requirements.

Graduate degrees are approved by the Graduate School and SUNY, and approved by and filed with the State Education Department.

Students who hold a bachelor or master's degree in a subject other than architecture are eligible for the 3.5 year M.Arch program leading to the accredited M.Arch degree. The undergraduate degree may be in any subject. All graduate programs are subject to the State University of New York (SUNY), the University's Graduate School, and the Department of Architecture's standards, procedures and requirements. Graduate degrees are approved by the Graduate School and SUNY, and approved by and filed with the State Education Department.

Graduate students are held to the department's academic standards. Two consecutive semesters with a GPA less than 3.0., or an "F" grade in any studio, are ground for dismissal at the discretion of the chair. Students receiving a grade lower than "C" in any graduate studio must repeat the studio.

The first two years (4 semesters) of the M.Arch 3.5-year curriculum consist of a core sequence of architectural studios and appropriate ancillary courses. The last year and a half allow the students to pursue specialization in one of four areas of concentration through the Graduate Research Groups in Ecological Practices, Inclusive Design, Material Culture and Situated Technologies. The 3.5 year M.Arch curriculum requires the satisfactory completion of 6 graduate studios, coursework in history, communications, construction, structures, environmental controls, professional practice, thesis preparation, electives, and a thesis or special project. The thesis must be presented to complete committees and guests during two formal interim reviews and formal semester-end critique. See the curriculum matrix and credit hours distribution for the 3.5-year M.Arch program below.

3.5-Year Master of Architecture (M.Arch.) Curriculum

Semester 1: Fall

ARC 501	Design Studio 1	7
ARC 511	Architectural Communications 1	3
ARC 531	Architectural History 1	3
ARC 541	Introduction to Building Technology	3
Total Semester Credits		16

Semester 2: Spring

ARC 502	Design Studio 2	7
ARC 512	Architectural Communications 2	3
ARC 534	Architectural History 2	3
ARC 552	Structures 1	3
Total Semester Credits		16

Semester 3: Fall

ARC 503	Design Studio 3	7
ARC 553	Structures 2	3

ARC 611	Architectural Communications 3	3
ARC 575	Environmental Controls 2.....	3
Total Semester Credits	.....	16

Semester 4: Spring

ARC 504	Design Studio 4.....	7
ARC 542	Construction Technology.....	4
ARC 573	Environmental Controls 1.....	3
ARC 582	Professional Practice	3
Total Semester Credits	.....	17

Semester 5: Fall

ARC 605	Research Studio.....	7
ARC 555	Structures 3.....	3
ARC 562	Architectural Theory	2
ARC xxx	Intellectual Domain.....	3
ARC xxx	Technical Methods	3
Total Semester Credits	.....	18

Semester 6: Spring

ARC 606	Research Studio.....	7
ARC xxx	Intellectual Domain.....	3
ARC xxx	Technical Methods	3
ARC xxx	Elective.....	3
Total Semester Credits	.....	16

Semester 7: Fall

ARC 607	Thesis/Research	7
ARC xxx	Elective	3
ARC xxx	Elective	3
Total Semester Credits	.....	13
Total Required Credits	.....	112

C. Master of Architecture Degree (M.Arch): 2-year program

Students who hold at minimum a four-year pre-professional degree in architecture from an accredited school of architecture, such as the University at Buffalo's B.S. in Architecture, are eligible to apply for the two-year M. Arch. program leading to the accredited M.Arch degree. The university sets minimum standards for a graduate degree; to be eligible for a graduate degree at the University at Buffalo, a student must: 1) be formally accepted to a major department; 2) complete all departmental degree requirements; 3) complete a minimum of 30 graduate credit hours with a minimum of 24 credit hours in residency; 3) file an "Application to Candidacy" listing all courses and grades used to satisfy the degree requirements; 4) achieve a 3.0 minimum cumulative grade point average. The Department of Architecture exceeds minimum standards by requiring 64-112 credits for a Master of Architecture. Each student enrolled in a Master's program at the University must pass a comprehensive exam, or complete an appropriate special project, or prepare a thesis based on independent research. Thesis abstracts must be approved by the

appropriate divisional committee and must be submitted to the Graduate School electronically. In addition to the Graduate School requirements, graduate architecture majors must complete all required architecture and architecture elective courses listed on the M.Arch. 2-year track curriculum matrix totaling a minimum of 64 credit hours and must maintain a minimum 3.0 grade point average in all courses. Students must complete a thesis or a special project to graduate with an M.Arch degree. Thesis students must work with a committee of at least two members; the thesis committee chair must be a member both of the Architecture Department faculty and of the University's Graduate School.

Graduate students are held to the Department's academic standards. Two consecutive semesters with a GPA less than 3.0., or an "F" grade in any studio, are grounds for dismissal at the discretion of the Chair. Students receiving a grade lower than "C" in any graduate studio must repeat the studio.

The M.Arch 2-year curriculum is built on the 4+2yr formula that requires a detailed analysis of student accomplishment of NAAB SPC in their undergraduate degree before assigning them a 2-yr curriculum. Students generally fall into three basic curricula: Design+GRG, Comprehensive+GRG and GRG (see 2.1.1.A). The program requires the satisfactory completion of three graduate studios, advanced coursework in structures, environmental controls, professional practice, intellectual domain and technical methods courses in areas of concentration, and a thesis or special project. A highlight of the program is the opportunity to work in one of four graduate research groups (GRG): Ecological Practices, *Inclusive Design*, *Material Culture* and *Situated Technologies*. that takes advantage of the cutting-edge faculty research and their expert networks. Each group ties architectural design to research agendas that presently and in the future will influence the design of the built environment. Inclusive Design addresses human factors like disability, age and gender; Ecological Practices explores the influence of environmental factors like energy, biodiversity and sustainability; Material Culture addresses the logic of construction and building assembly through traditional and new materials while Situated Technologies explores ubiquitous digital technologies in the design of responsive architecture and interactive urbanism. The disciplinary networks that these groups engage include public health, anthropology, sociology, gender studies, geography, landscape architecture, urban planning, material science, computer science, robotics, media, visual arts, engineering and applied sciences.

See the curriculum matrix and credit hours distribution for the 2-year M.Arch program below:

2-Year Master of Architecture (M.Arch.), Architectural Design + Graduate Research Groups

Semester 1: Fall

ARC 503	Design Studio 3.....	7
ARC 553	Structures 2.....	3
ARC 611	Architectural Communications 3	3
ARC 575	Environmental Controls 2.....	3
Total Semester Credits		16

Semester 2: Spring

ARC 504	Design Studio 4: Comprehensive Design	7
ARC 542	Construction Technology	3
ARC 573	Environmental Controls 1.....	3
ARC 582	Professional Practice	3
Total Semester Credits		16

Semester 3: Fall

ARC 606	Research Studio.....	7
ARC xxx	Intellectual Domain.....	3
ARC xxx	Technical Methods	3
ARC 555	Structures 3	3
Total Semester Credits		16

Semester 4: Spring

ARC 608	Research Studios.....	7
ARC xxx	Intellectual Domain	3
ARC xxx	Technical Methods	3
UAB xxx	Elective	3
Total Semester Credits		16

Total Required Credits 64

Note: Students may register for a maximum of one independent study course each semester, with a maximum career total of two.

2-Year Master of Architecture (M.Arch.), Comprehensive Design + GRG/ GRG Curriculum

Semester 1: Fall

ARC 605	Comprehensive Design Studio or Research Studio	7
ARC xxx	Intellectual Domain.....	3
ARC xxx	Technical Methods	3
ARC 575	Environmental Controls 2.....	3
Total Semester Credits		16

Semester 2: Spring

ARC 606	Research Studio.....	7
ARC xxx	Intellectual Domain.....	3
ARC xxx	Technical Methods	3
ARC 582	Professional Practice	3
Total Semester Credits		16

Semester 3: Fall

ARC 607	Research Studio/Directed Research	7
ARC xxx	Elective/ Research Methods	3
ARC xxx	Elective	3
ARC 555	Structures 3	3
Total Semester Credits		16

Semester 4: Spring

ARC 608	Research Studio/Thesis	7
ARC xxx	Elective	3

ARC xxx	Elective	3
UAB xxx	Elective	3
Total Semester Credits		16

Total Required Credits 64

D. Areas of Concentration (Graduate Research Groups)

As mentioned above, the faculty have clustered their courses into four areas of concentration. These areas represent centers of design enquiry and research for the Department in terms of faculty expertise, research, creative work, scholarship and teaching activity. The four areas are: Ecological Practices, Inclusive Design, Material Culture, and Situated Technologies.

- The Ecological Practices Graduate Research Group critically engages environmental systems, and examines the role that architecture and urbanism play in harnessing and stewarding them. Our research recognizes the built/natural environment as a complex web of interacting parts constantly exchanging energy and resources. In keeping with this perspective, we are interested in developing architecture and urban design that is as dynamic as the context from which it arises.
- The Inclusive Design Graduate Research Group focuses on design processes grounded in democratic values of non-discrimination, equal opportunity, and personal empowerment. We provide both a theoretical and working knowledge of Inclusive Design, focused on environments, products, and systems for a wider range of people, especially those in underserved populations.
- The Material Culture Graduate Research Group builds on Buffalo and the Niagara Region's legacy of material innovation, from infrastructural experiments in moving goods to slip-forming construction of concrete silos. Their architectural research explores constructive sensibilities and critically investigates how our culture is deeply embedded in material artifacts. The group pursues its design inquiry through full-scale fabrication, assembly and installation.
- The Situated Technologies Graduate Research Group focuses on the design of artifacts, spaces and media that are responsive to their context. The group is interested in the possibilities offered by pervasive computational technologies for exploring new forms of architecture and urbanism that foster social interaction with and within the built environment.

The requirements for completing an area of concentration are satisfactory completion of 2 area-designated studios, 2 technical methods and 2 intellectual domain and a thesis or special project dealing with issues central to the concentration area.

E. Minor in Architecture

Non-architecture majors or students who leave the architecture major before completing their B.S. degree requirements, may apply for a Minor in Architecture. The Minor is offered in the belief that the study of architecture offers a unique and valuable background for students of diverse intellectual interests and career ambitions. To complete the Minor in Architecture, students must take nine credits of lower division architecture courses and twelve credits of upper division architecture courses. As minors, students may not be eligible to register for certain architecture courses, such as studio. Students need a 2.5 average in two lower division courses for admission to the minor, and must maintain a 2.5 average in architecture minor courses to graduate with the Minor in Architecture.

F. Distribution of General, Professional, and Elective Coursework

B.S. in Architecture	Credit Hours
General Education	44*
Architecture Courses Required	81
Architecture Electives.....	03** ...
TOTAL	128

M.Arch. 2-year track

General (University mandated)	0
Architecture Courses Required	40
Architecture Electives.....	18
University at Buffalo Cognates.....	6^
TOTAL	64

Combined 4+2 Program

General (University mandated)	41*/**
Architecture Courses Required	123
Architecture Electives.....	24
University at Buffalo Cognates.....	6^
TOTAL	190

M.Arch. 3.5-year track

General (University mandated)	0
Architecture Courses Required	94
Architecture Electives.....	18
TOTAL	112

Legend:

* = ARC 211 is included in general education as it is a SUNY-wide approved American Pluralism general education course

** = Effective Fall 2011 and thereafter, one Architecture elective (3.0 credits) is eliminated and returned to general education, increasing the number of non-Architecture content courses to 44.0 credit hours.

^ = University at Buffalo cognates. 2-year M.Arch. students typically complete two cognates (6.0 credit hours) of coursework from outside the Department of Architecture. Sample graduate departments may include Art, Visual Studies, Media Study, Art History, Urban Planning, Geography, Anthropology, Industrial Engineering, and Public Health. This ensures that Buffalo 4+2 students complete a minimum of 45.0 credit hours of non-Architecture content courses.

2.2.3. Curriculum Review and Development

Annual self-assessment of the program as well as long range planning initiates discussion for curricular changes. These are in response to evolving pedagogical needs or accreditation requirements.

The Chair annually constitutes a Curriculum Committee that reviews all matters related to curriculum. The curriculum committee is charged with reviewing these requests and proposing options for implementation. The voting faculty reviews these options and votes on them for implementation. The Chair, with the assistance of Director of Professional Studies, the Assistant Deans for Undergraduate and Graduate Education, implements them into the program.

2011-2012 Curriculum Committee

Prof. Annette LeCuyer (Chair), Assoc. Prof. Hiro Hata, Asst. Prof. Laura Garofalo, Clin. Prof. Ken Mackay, Asst. Dean for Undergraduate Education Multari (ex officio)

2012-2013 Curriculum Committee

Assoc. Prof. Jean Lamarche (Chair), Prof. Brian Carter, Asst. Prof. Laura Garofalo, Asst. Prof. Despina Stratigakos, Asst. Dean for Undergraduate Education RJ Multari (ex officio)

3.5 yr MArch ad hoc working group

Assoc. Prof. Jean Lamarche, Assoc. Prof. Kory Smith, Prof. Brian Carter, Prof. Annette LeCuyer

BS. Arch ad hoc working group

Assoc. Prof. Beth Tauke, Asst. Prof. Georg Rafailidis, Clin. Prof. Dennis Maher, Asst. Prof. Laura Garofalo, Asst. Prof. Jordan Geiger, Asst. Prof. Segio Lopez-Pineiro, Asst. Prof. Martha Bohm, Asst. Prof. Joyce Hwang, Clin. Prof. Ken Mackay

2013-2014 Curriculum Committee

Prof. Brian Carter (Chair), Asst. Prof. Laura Garofalo, Assoc. Prof. Hadas Steiner, Asst. Prof. Jordan Geiger, Asst. Dean for Graduate Education Shannon Philips (ex officio)

Promotions & Tenure ad hoc working group

Prof. Annette LeCuyer (Chair)
Associate Prof. Kory Smith
Assistant Prof. Mark Shepard

2014-2015 Curriculum Committee

Prof. Brian Carter (Chair), Asst. Prof. Laura Garofalo, Assoc. Prof. Hadas Steiner, Asst. Prof. Georg Rafailidis, Asst. Dean for Graduate Education Shannon Philips (ex officio)

2.3. Evaluation of Preparatory/Pre-Professional Education

2.3.1. Bachelor of Science in Architecture Degree (BS): 4-year program

For students with no previous postsecondary education experience, the Department of Architecture uses similar requirements for departmental admission at the freshman level as the university uses; that is, high school average, completed high school courses, rank in high school class, and standardized exam scores (SAT/ACT). Prospective students with no previous postsecondary education interested in Buffalo Architecture must submit an application early in the fall of their senior year of high school.

All freshman applicants interested in Buffalo Architecture must complete and submit an admissions design assignment, in addition to all other required University at Buffalo application materials. The design assignment will be used to determine an applicant's design skills prior to admission. It will be one of many factors considered in the review of an applicant's eligibility for admission into UB Architecture. First-time freshman applicants are notified of the departmental decision at the same time that they are notified of the university's admission decision, with competitive admission on a space available basis. Students intending to major in architecture are informed that certain knowledge and skill sets are highly recommended for the major. These include an ability in free-hand drawing, graphics, and three-dimensional making; regents-level or advanced placement physics and calculus; and basic computing

skills. In Fall 2014, over 380 prospective freshmen applied for admission to the pre-professional Bachelor of Science in Architecture .

Transfer students apply to both the University and the Department and must be accepted by both. Transfer applicants must include transcripts, a written statement elucidating their interest in architecture, and a portfolio if the applicant seeks advanced studio placement. Most recently, admitted transfer students have an average GPA of 2.70 . Transfer students are rarely placed beyond the sophomore year studio sequence. The Department of Architecture requires all admitted Bachelor of Science in Architecture students complete a minimum of 42 credits of ARC-prefixed courses to fulfill the Department's academic credit residency requirement. In addition, the Department maintains formal course articulations with numerous colleges statewide to standardize course waivers and advanced placement

2.3.2. Master of Architecture Degree (M.Arch): 3.5-year program

Applicants apply directly to the Department of Architecture and are reviewed for admission by a faculty admissions committee based on undergraduate transcripts, a statement elucidating the student's interest in architecture, three letters of recommendation, and a portfolio of undergraduate, professional and/or personal work. The portfolio is evaluated in a fashion that reflects the non-architecture background of these students. Special consideration is given to fields related to architecture, building technology, or environmental design, although other subject area backgrounds are not discouraged. GRE scores are required. International students must demonstrate English proficiency with a TOEFL score not less than 79 (internet-based test). International students may also submit an IELTS exam score with a 6.5 overall score with no individual subscore below 6.0. Recently admitted students typically have a GPA over 3.24; recent selectively rates for this track are between 80% (fall 2013) and 96% (fall 2014). Students admitted to the graduate program are informed that certain skill sets are highly recommended prior to entering the program. These include ability in freehand drawing, graphics, three-dimensional making and basic computing skills. College-level physics and calculus are recommended for entry in the program.

2.3.3. Master of Architecture Degree (M.Arch): 2-year program

Applicants apply directly to the Department of Architecture and are reviewed for admission by a faculty admissions committee based on undergraduate transcripts, a statement elucidating the student's interest in architecture, three letters of recommendation, and a portfolio of undergraduate, professional and/or personal work. GRE scores are required. International students must demonstrate English proficiency with a TOEFL score not less than 79 (internet-based test). International students may also submit an IELTS exam score with a 6.5 overall score with no individual subscore below 6.0.

As part of the portfolio and transcript evaluation, the admission committee checks to determine which NAAB SPCs the student covered in their undergraduate education including *comprehensive design* (see *IV.1.8 Admissions Worksheet*). Based on this evaluation, the student is admitted into one of three tracks: Architectural Design + GRG, Comprehensive Design + GRG and GRG. Admitted students can ask to be reevaluated upon their arrival if they feel they have completed courses they are ask to take again. They need to provide course descriptions, assignments and grades from the courses to be reevaluated.

Recently admitted students have a GPA over 3.3; recent selectively rates for this track are between 71% and 96% . Students admitted to the graduate program are informed that certain skill sets are highly recommended prior to entering the program. These include physics and calculus, and a demonstrated ability to use computers in design exploration and representation. Those not able to show the latter are required to take ARC 611: Architectural Communications 3.

2.4. Public Information

2.4.1. Statement on NAAB-Accredited Degrees

As required, the Department website contains the exact language describing the parameters of an NAAB accredited professional degree program. A direct link to the NAAB Performance Criteria is provided to all students and faculty on the Department's website: <http://ap.buffalo.edu/academics/Architecture/naab-accreditation.html>.

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 preprofessional degree is not, by itself, recognized as an accredited degree.

The University at Buffalo is the only campus in the State University of New York system to offer the accredited professional master of architecture (MArch) degree. The University at Buffalo School of Architecture and Planning offers the following NAAB-accredited degree programs:

- *M Arch (pre-professional undergraduate degree + 64 graduate credits)*
- *M Arch (non-pre-professional undergraduate degree + 112 graduate credits).*

Next accreditation visit for all programs: 2015.

2.4.2. Access to NAAB Conditions and Procedures

The 2009 NAAB Conditions and 2012 Amended NAAB Procedures are available to faculty, students and parents, in the Architecture and Planning Library and on the School's website:
<http://ap.buffalo.edu/academics/Architecture/naab-accreditation.html>

2.4.3. Access to Career Development Information

The information below on career development is available on the School's website:
<http://ap.buffalo.edu/academics/related/online-resources/career-services.html>

It provides detailed information on resume writing, interviewing process, job and internship search and career exploration. It also has links to web resources for architects:

- www.ARCHCareers.org
- *The NCARB Handbook for Interns and Architects (available in the APL Library)*
- *Toward an Evolution of Studio Culture (available in the APL Library)*
- *The Emerging Professional's Companion: <http://www.epcompanion.org/>*
- www.NCARB.org
- www.aia.org

- www.aiaa.org
- www.acsa-arch.org

2.4.4. Public Access to APRs and VTRs

All NAAB Annual Reports, NAAB responses, final decision letter from NAAB, most recent APR and the final edition of the most recent Visiting Team Report including attachments and addenda are available to the public in the Architecture and Planning Library. This information is also available on the Department's website: <http://ap.buffalo.edu/academics/Architecture/naab-accreditation.html>

2.4.5. ARE Pass Rates

The ARE pass rates for the institution are made available to the public in the Architecture and Planning Library. This information is available on the Department's website: <http://ap.buffalo.edu/academics/Architecture/naab-accreditation.html>

Part Three (3): Progress Since Last Site Visit

3.1. Summary of Responses to the Team Findings

A. Responses to Conditions Not Met

The following conditions were cited as Not Met:

Part I. 1.4 Long Range Planning

Part II. 1.1 Student Performance Criteria:

B.1 Pre-design

B.6 Comprehensive Design

Part II. 3 Evaluation of Preparatory Pre-professional Education

We have addressed these in the following manner:

Part 1.1.4 Long Range Planning

The 2012 VTR states, “The APR did not provide a description of a long-range plan or the process the program has defined to develop a plan. There was no long-range planning document available in the team room for review.”

Section I.1.4 Long Range Planning addresses this in detail. In addition, we will have available in the team room documents from the retreats that were conducted at the School level to develop a long range plan.

Part 2.1.1 SPC: B.1 Pre-design

Since the last accreditation visit, we have made changes to integrate the Pre-design SPC into the core studio sequence in response to the 2012 VTR, which states, “The team did not see evidence of ability to develop a comprehensive inventory for a building program, showing quantitative and qualitative characteristics of user requirements for a project. Ability to develop and apply site selection and design assessment criteria was not evident.” In the 4+2 year program, Pre-design is part of Arc 301 and Arc 403. In the 3.5 year program, it is part of Arc 503. Preceding studios also have been developed to introduce facets of Pre-design in to their project briefs.

Part 2.1.1 SPC: B.6 Comprehensive Design

Since the last accreditation visit, we have made a number of changes in our 4+2-year and 3.5-year studio curricula to address this issue. Previously, the Comprehensive Design Studio was tasked not only with SPC B.6 Comprehensive Design, but also addressed SPCs A.7 Use of Precedents, B.11 Building Service Systems, and B.12 Building Materials and Assemblies. Those SPCs are now covered in other courses, to enable the Comprehensive Studios to focus more intently on integrated building design.

We have also reconsidered the level of complexity of the project brief. As the 2012 VTR noted, “the studio work in the fourth year comprehensive design studio introduced many new issues to students such as high-rise construction, urban mixed use, and housing. Integrating this new knowledge appears to have limited the time for development of a comprehensive project.” While we agree that the housing mixed-use project was perhaps too complex for many students to handle as a comprehensive project, we believe that a housing studio – and all of the new technological, environmental, and cultural questions it entails – is an important part of an architectural education. We therefore decided to retain the housing project in the 4th year of the 4+2 program, and shift the requirements for the Comprehensive Design SPC to the 3rd year, 2nd semester (Arc 302), in which we have reduced the scope and complexity of the project brief. We have also reduced the scope and complexity of the comprehensive studio project in Arc 504, in the 3.5

year program. These changes will better enable students to focus their efforts on systems integration and developing a more comprehensive project.

It should be noted that although the comprehensive design SPCs have been shifted from Arc 403 to Arc 302 in the 4+2 year program, the Arc 403 studio still continues to address urban housing as an integrated building project. Effectively, Arc 301, 302, and 403 is a sequence of studios that all address the integration of systems and technologies to varying degrees. In the 3.5 year program, Arc 503 and 504 are designed to accomplish the same goals. Within these studios, we frequently engage systems engineers, structural engineers, and other specialists from local firms to review student projects. Additionally, we strive to staff these studios with licensed architects, and practitioners from the field. Within the past two years, we have made two new tenure-track hires – Jin Young Song and Nicholas Rajkovich – specifically for positions in Integrated Design.

Part 2.3 Evaluation of Preparatory Pre-professional Education

In response to evaluation for comprehensive studio in their undergraduate curriculum

All 2-year M.Arch program applicants are reviewed in the rigorous admissions process by at least two faculty members and assessed whether their portfolios and transcripts demonstrate ability in comprehensive design, and other NAAB SPCs. Those having attended a pre-professional UG program, and found not to have had a compatible experience are placed in alternative tracks that ensure that all NAAB SPCs are covered when they graduate.

These tracks are:

- 2-year M.Arch- Graduate Research Group: Students admitted to this group either completed their undergraduate degree in the B.S. Arch program at the University at Buffalo, or have demonstrated equivalent fulfillment of all NAAB criteria in their submitted portfolio, work samples, and transcript.
- 2-year M.Arch- Comprehensive Design + Graduate Research Group: Students admitted to this group have completed a pre-professional program in Architecture or equivalent but have not fulfilled Comprehensive Design NAAB criteria. They are placed in Arc 605, a comprehensive design studio that is either taught as part of a Graduate Research Group studio, or as a separate graduate studio.
- 2-year M.Arch- Architecture Design + Graduate Research Group: Students admitted to this group have received a pre-professional program or equivalent in Architecture, but have not fulfilled a number of NAAB criteria. They are placed in a year of the graduate core studios (Arch 503 and Arc 504), and enroll in other courses as required.
- 3.5-year M.Arch: Students admitted to this group have either had no prior education in architecture, or have not had sufficient architectural education/experience to warrant consideration for admission to any of the 2-year tracks.

B. Responses to Causes of Concern

The following items were noted as Causes of Concern

Site Design

Comprehensive Design

Student Participation in Governance

Advising

Site Design

The 2012 VTR notes “a lack of diversity in studio site contexts presented as part of design problems. The overwhelming majority of sites were urban in nature with little topographic variety, grading design, parking lot layout, site circulation, or service access.” Since the last accreditation, we have worked to systemically

implement a greater variety of site types and site design criteria into the studio curriculum. We created a set of guidelines(see IV.1.5 Studio Curriculum Guidelines) for studio faculty to develop project briefs. These guidelines include a matrix of project criteria, including site types, as well as program type, building square footage, SPCs to address. Arc 202 (4+2 program) and Arc 502 (3.5 program) specifically give students sites with topographic variation and grading design.

Comprehensive Design

We have made substantial changes to the Comprehensive Studios. See Part II. 1.1 SPC: B.6 Comprehensive Design above for details.

Student Participation in Governance

We have more actively engaged students and student feedback in a number of important schoolwide efforts. We have included student representatives in every Department of Architecture faculty search committee since the 2012-13 academic year. In addition to including the student representative in the interviewing process, we have solicited participation and feedback from the student body at large regarding the searches. Since then, we have made 6 full time tenure track hires, each with substantial student input.

The Department of Architecture's student groups continue to be engaged in helping plan the School's lecture series, an important part of the life of the school.

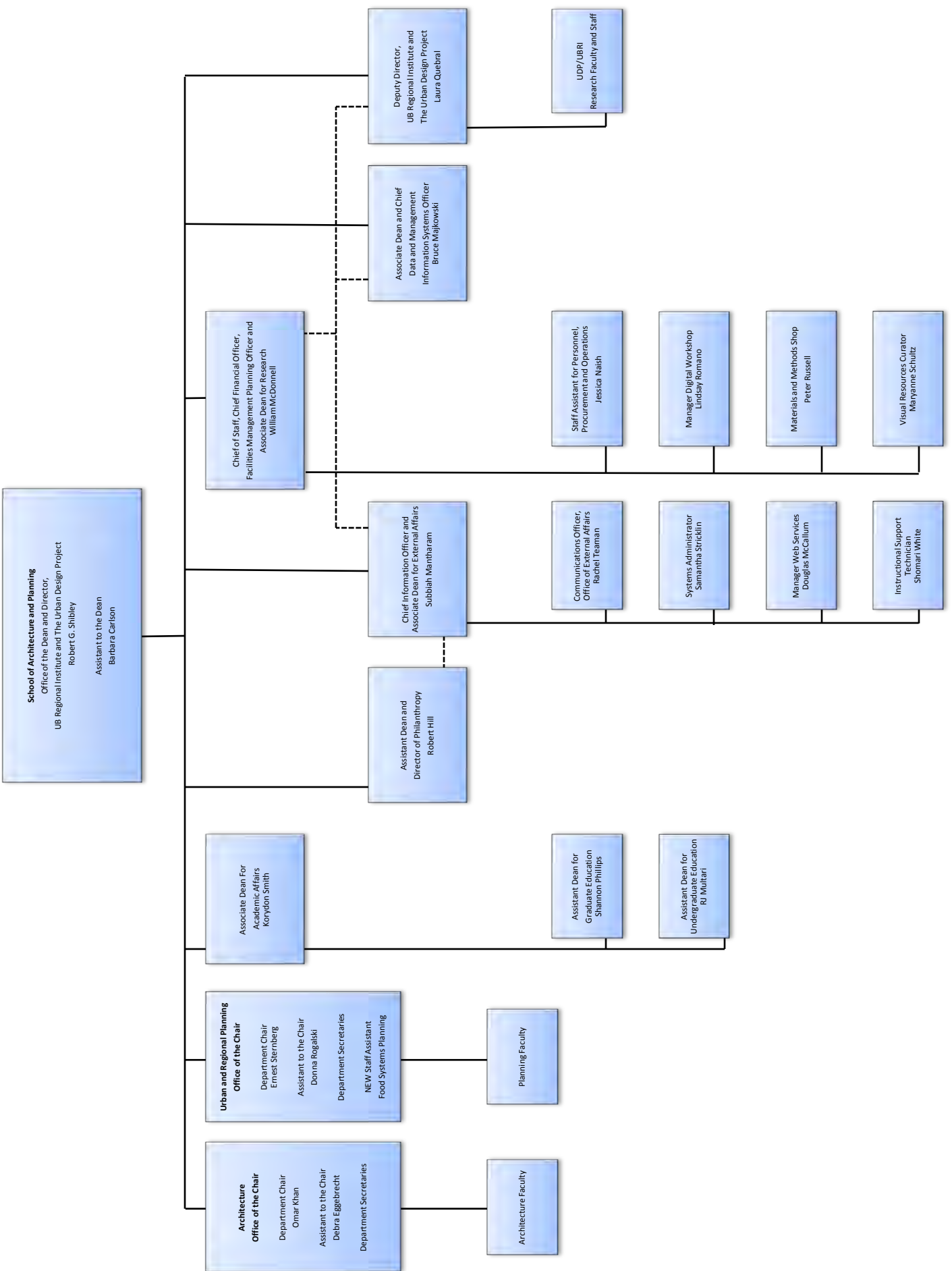
Additionally, the Dean, Robert Shibley has scheduled meetings with students, at least once at the beginning of each semester, and meets regularly with the leadership of each student group. The Chair, Omar Khan, has also scheduled meetings with students, which have had an impact on the curriculum. In response to the outcome of a recent meeting with the 3.5 year program students, for example, the Department is initiating a pre-semester skill-building workshop for new graduate students.

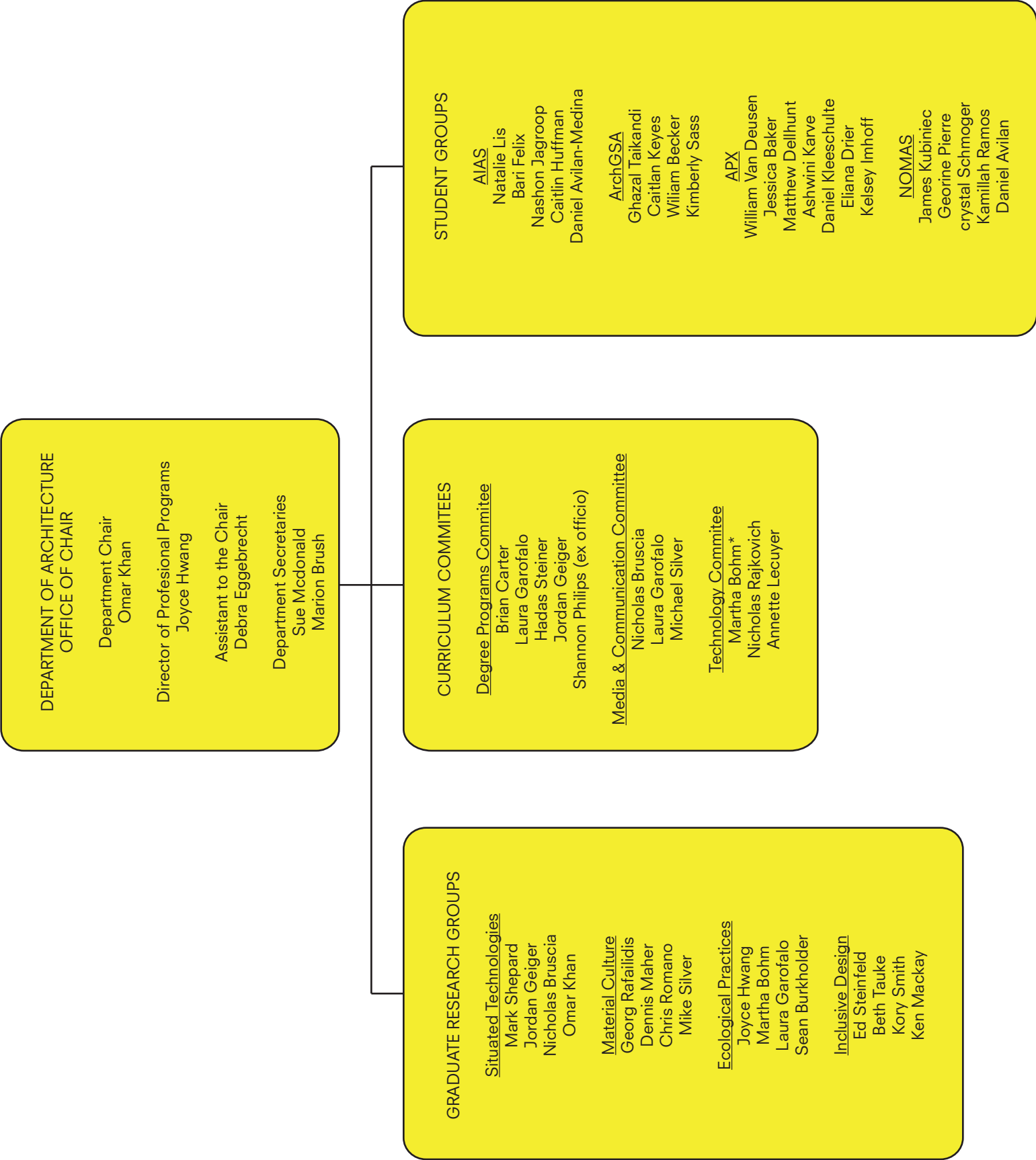
Advisement

The 2012 VTR states that the "visiting team heard concerns from students about the adequacy of career advising." As noted, undergraduate academic advising was previously assigned to one assistant dean. Since the last accreditation, we have worked to improve academic advisement in general through the allocation of additional resources, and have also focused on developing opportunities for career advisement. Significantly, the School of Architecture and Planning has enlisted a career counselor to meet with students by appointment once a week, and the School's Undergraduate Academic Services unit posts career opportunities on the School's LinkedIn page. In addition, the Assistant Dean for Undergraduate Education and Architecture Chair have discussed the Undergraduate Academic Services staff being educated on NCARB IDP. We have also started to work with the local AIA chapter to develop portfolio and resume review sessions, which have been held once a semester over the 2013-14 academic year, and are open to all students as well as emerging professionals. In addition, we are making a concerted effort to consistently keep students updated on local networking events and professional opportunities. It should also be noted that several graduate research groups regularly mentor their graduate students to assist them in beginning their careers.

Part Four (4). Appendices

4.1. School and Department Organizational Charts





4.2. Diversity Plan



University at Buffalo

School of Architecture and Planning Diversity Plan (Fall 2014 Draft)

The School of Architecture and Planning at the University at Buffalo is the only public, nationally-accredited programs in architecture and planning in New York State. Despite status as one of the top ten most racially and ethnically diverse universities in the U.S. and number-one ranking in the percentage of international students among public U.S. institutions, the school struggles tremendously with recruiting and retaining students who are women and underrepresented minorities—challenges that are equally evident in the architecture and planning professions. According to the most recent data from the National Architecture Accreditation Board, 41% of architecture students in the United States are women. The University at Buffalo falls below that.

Diversity Plan

2012-2015

The School of Architecture and Planning at the University at Buffalo is committed to becoming a leader in diversity and inclusion research, policies, and practices both in the university and in architecture and planning nationally. Fostering a culture of inclusion is essential for educating students who will work and live in an increasingly diverse culture. Broadening the diversity of those who study, teach, research, and practice architecture and planning ensures that a wider variety of diverse needs will be met through these professions.

A diverse faculty and student body are necessary components of a quality education for all students because diversity:

- enriches the educational experience by providing students with the opportunity to learn from individuals who differ from them.
- promotes personal growth and a healthy society by challenging stereotyped preconceptions, encouraging critical thinking and helping students learn to communicate effectively with people of varied backgrounds.
- strengthens communities and the workplace by preparing students for citizenship in an increasingly complex, pluralistic society, and fostering mutual respect and teamwork.
- enhances the country's economic competitiveness by effectively developing and using the talents of all citizens.



University at Buffalo

School of Architecture and Planning Diversity Plan (Fall 2014 Draft)

The School of Architecture and Planning Diversity Plan focuses on improving and supporting diversity in areas including, but not limited to:

- | | |
|---------------------------------------|------------------------------|
| 1. race/ethnicity | 6. religion |
| 2. socio-economic status | 7. age |
| 3. gender | 8. life experience |
| 4. sexual orientation/gender identity | 9. international citizenship |
| 5. disability | |

Seven goals structure the School of Architecture and Planning Diversity Plan:

1. Publicly Celebrating Diversity: Develop a public image for the School of Architecture and Planning that conveys a message of diversity
2. Recruitment: Recruit greater numbers of applicants from underrepresented groups into both the faculty and the student body.
3. Student Development: Retain, and graduate greater numbers students from underrepresented groups. Retain and tenure greater numbers of faculty from underrepresented groups.
4. Post Graduate Support: Provide a network of support for SA&P alumni relative to their careers, desire for lifelong learning and engagement, social interactions, and willingness to provide service and/or support to strengthen and advance the School.
5. Promotion and Tenure: Support diversity in faculty and staff hiring, promotion and tenure.
6. Community Engagement: Engage the diverse Buffalo-Niagara community through research, scholarship and service.



University at Buffalo

School of Architecture and Planning Diversity Plan (Fall 2014 Draft)

2014 – 2015 Diversity Plan

GOALS	OBJECTIVES	STRATEGIES
1. Develop a public image for the School of Architecture and Planning that conveys a message of diversity	1. Continue to monitor the language of school website(s) and printed materials to ensure that diversity and inclusion are prominent components of the school.	1. Academic affairs and external affairs in consultation with the Dean's council and department chairs keep diversity at the forefront of the school's publications
	2. Publicize our diversity initiatives.	1. Publish the school's Diversity Plan and yearly progress report.
	3. Feature students from underrepresented groups in SA+P publications.	1. EA coordinates with AA to select students for publications who reflect the broad diversity of our academic programs.



University at Buffalo

School of Architecture and Planning Diversity Plan (Fall 2014 Draft)

2. Recruit talented and diverse applicants	1. Increase the diversity in the undergraduate architecture application pool	<p>1. Participate in the Architecture + Education Program sponsored by the Buffalo Architecture Foundation, which pairs a graduate architecture student and an architect with public school teachers to infuse architecture into the curriculum.</p> <p>2. Participate in Tech Savvy, a program that inspires middle school girls to pursue careers in science, engineering, technology, and math areas through fun workshops.</p> <p>3. Provide continual support to the Architecture and Design Academy, which provides a design curriculum to high school students.</p> <p>4. Assist the College and Career Girls Prep Charter School in developing their design curriculum.</p>
	2. Increase the diversity in the BAED application pool	<p>1. Engage public grade school and high school students from underrepresented groups to foster awareness of and interest in planning.</p> <p>2. Participate in Tech Savvy, a program that inspires middle school girls to pursue careers in science, engineering, technology, and math areas through fun workshops.</p> <p>3. ADUE will continue to build and strengthen the connections between community colleges and the BAED program.</p>
	3. Increase the diversity in the graduate applicants across	<p>1. Partner with undergraduate programs with substantive number of</p>



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School of Architecture and Planning Diversity Plan (Fall 2014 Draft)

programs including MArch, MUP, MS, PhD, and the certificate HP program

students from underrepresented groups.

2. Develop partnership with faculty and students from the Historically Black Colleges and Universities (HBCU) architecture and planning programs.

3. Work with UB's Center for Academic Development Services and Educational Opportunity Program (EOP) to establish a pipeline to SA+P.

4. Develop a process for diverse community members who wish to engage historic preservation as auditors.

5. Recruit international applicants through our study abroad programs

6. Work with our alums in other countries to recruit applicants.

7. Continue to develop connections between our current international students and prospective students from their home institutions (eg mailing publications, social media, grassroots recruitment, etc.)

8. Approach and recruit from universities with high number of international undergraduate students

9. Build connections with academic centers outside of the US with the help of our international faculty

10. Increase number of Schomburg



University at Buffalo

School of Architecture and Planning Diversity Plan (Fall 2014 Draft)

		<p>nominees.</p> <p>11. Increase the diversity categories our Schomburg nominees fall within (e.g. more nominees based on LGBTQ, religion, etc.)</p> <p>12. Persuade the university to administer the Schomburg through the Office of Graduate Enrollment Management, rather than within the Graduate School</p>
<p>3. Support and nurture current students, including students who fall within our diversity categories</p>	<p>1. Develop and maintain funding sources that are focused on students from underrepresented groups</p>	<p>1. Increase the number of McNair scholars.</p> <p>2. Develop a SA+P scholarship program for students with disabilities.</p> <p>3. Assist SA+P women to seek funding sources specifically designated for women.</p> <p>4. Create, host and pursue funding for events that highlight the contribution of underrepresented population to the disciplines of architecture and planning.</p>
	<p>2. Establish academic success strategies for students from underrepresented groups.</p>	<p>1. Modify undergraduate schedules/curricula to meet the needs of students from the Educational Opportunity Program (EOP) and/or English as a Second Language Program (ESL).</p>

3. Mentor students from underrepresented groups.	<p>1. Invite alumni from underrepresented groups to serve as mentors for current students.</p> <p>2. Harness the potential in AA to build strong relationships with students so they have an additional layer of support when they have issues, need advice, etc.</p> <p>3. Mentor and encourage diverse students to publish and promote their work</p> <p>4. Encourage students to publish work related to diversity and inclusion</p>
4. Establish external support structures.	<p>1. Provide financial support and mentorship for PhD students to attend and participate in conferences so that they begin to forge relationships in a community of scholars</p> <p>2. Build on the above model to support masters-level students in need to engage in conferences that will enhance their connections with the profession</p> <p>3. Identify philanthropic and development supporters for diversity-based scholarships.</p>
5. Expand students' perspective through international study.	<p>1. Ensure comparable study abroad participation rates for underrepresented students.</p> <p>2. Harness the school's scholarship resources for students in need who wish to participate in study abroad</p>
6. Students in crisis situation (what type of crisis, who can help the students – being	



University at Buffalo

School of Architecture and Planning Diversity Plan (Fall 2014 Draft)

	proactive and mindful in a crisis situation)	
4. Foster an alumni community that values diversity	1. Connect SA+P graduates to organizations connected with diversity and inclusion.	1. Continue to connect alumni with the AIA Diversity and Inclusion initiative 2. Continue to engage alumni in the universal design community 3. Support growth in the NOMA alumni chapter 4. Infuse diversity and inclusion into the annual alumni reception at the APA national conference 5. Build on EA's <i>Buffalo In</i> model (an event focused on urban issues in Philadelphia, co-organized by a woman planning alum) to infuse diversity and inclusion in that alumni programming
5. Support diversity in faculty and staff hiring, promotion and tenure	1. Promote SA+P as a diversity leader in an effort to recruit faculty from underrepresented groups.	1. Promote faculty and staff work related to diversity. 2. Publish scholarly work related to our diversity goals 3. Announce positions in venues that focus on underrepresented groups. 4. Identify individuals from underrepresented groups who fit position descriptions, and encourage them to apply. 5. Support professional development for faculty and staff related to diversity and inclusion
	2. Mentor all junior faculty, especially those from	1. As part of the process, help faculty identify their areas of strengths and



University at Buffalo

School of Architecture and Planning Diversity Plan (Fall 2014 Draft)

	underrepresented groups.	challenges and encourage them to develop and implement a 'plan of action' to meet their goals in the areas of research, teaching and service.
6. Engage the diverse Buffalo-Niagara community through research, scholarship and service	1. Ensure that SA+P lecture series contains a diverse group of speakers as well as diversity content.	1. Public Programming committee build upon a foundation of diversity we are creating in our lecture series 2. EA continue to share information with the community on the diverse array of programming offered publicly at B/A+P
	2. Foster excellence in research and service through projects in Center for Architecture and Situated Technologies, IDEA Center, Center for Urban Studies, Food Systems Planning and Healthy Communities Lab, UB Regional Institute, and Urban Design Project.	1. Engage students from underrepresented groups in projects taking place in the research centers 2. Continue to support the research centers and their efforts to engage and serve the community (eg Food Policy Summit, Citizen Planning School, Perry Choice Neighborhood Initiative, etc.)
7. Use evidence-based decision making and evaluation methods to strengthen the diversity initiatives of the school through the systematic collection and organization of data	1. Identify information needed on diversity issues, and gather/organize/analyze information.	1. Develop and administer survey that identifies issues of diversity and inclusion within the school. 2. Develop a database to track information on students from underrepresented groups in the school. 3. Collect and analyze national data on students and faculty from underrepresented groups in schools of architecture and planning. 4. Collect and analyze national data on those from underrepresented groups working in the fields of architecture and planning.



University at Buffalo

School of Architecture and Planning Diversity Plan (Fall 2014 Draft)

	5. Track number of students who receive Association for Women in Architecture Scholarships, National Association of Women in Construction Scholarships, Eleanor Allwork Scholarships, and Judith McManus Price Scholarships.	
2. Seek the advice of experts in student services and the architecture and planning fields to help shape SA+P diversity initiatives.	1. Establish an SA+P Diversity Advisory Group to assist in the development and refinement of the Diversity Plan. 2. Meet with UB diversity experts. 3. Meet with national diversity experts in the architecture and planning fields.	

4.3 List of documents to be available in the team room

- 1) Studio Culture Policy
- 2) Self-Assessment Policies and Objectives
- 3) Personnel Policies
- 4) Department organization and governance
- 5) Student-Faculty Ratios
- 6) Space Ratios for Faculty
- 7) Space Ratios for studio teaching
- 8) List of Computing resources available to students
- 9) Admission Policies/Requirements
- 10) Advising Policies
- 11) Policies on Use/Integration of Digital Media
- 12) Policy on Academic Integrity
- 13) Policies on Library/Info Resource Collection and Development
- 14) Info Literacy Program and integration into Program
- 15) Grievance Policies
- 16) Syllabus Guidelines
- 17) NAAB Annual Reports – Statistical Report

4.4. Course Descriptions

Course Number/Title	ARC 101 – Design Studio 1: Embodiment and Space
Credits	5
Type of Course	Studio
Required/Elective	Required
Dates Offered	Fall 2012, Fall 2013, Fall 2014
Instructors:	2012: Beth Tauke (Coordinator), Christopher Romano, Matthew Hume 2013: Kory Smith (Coordinator), Christopher Romano, Matthew Hume 2014: Joyce Hwang (Coordinator), Karen Tashjian, Matthew Hume
Prerequisites	Architecture Major

Course Overview

The architecture studio is a participatory, experiential design laboratory which provides a working forum for developing conceptual thinking and critical awareness in design. The course examines factors that influence our experience of space and how we affect space through what we construct. Through a series of projects, students develop general abilities to visualize, conceptualize, and articulate spatial ideas. Studio projects will emphasize the development of 2D and 3D constructions as: 1) modes of seeing, thinking, and making, and 2) representational techniques for developing and presenting design concepts. Students develop awareness and understanding of visual, constructive, and inhabitational logics in the design process.

Course Goals & Objectives

Articulate and develop Spatial Logics, with emphasis on:

- Spatial ordering systems, Formal composition
- Proportioning systems, including proportion in relation to the human body
- Geometric description of actual and projected conditions

Articulate and develop Conceptual Frameworks, with emphasis on:

- Considering design in both its physical and cultural contexts
- Considering narratives and spatial sequencing in designing spaces

Articulate and develop Tectonic Logics, with emphasis on:

- Developing an understanding of basic structural logics through the process of making
- Describing spatial, material, and structural relationships through drawing and modeling

Develop Representational Techniques, with emphasis on:

- Developing facility in a variety of media techniques and conventions appropriate to various design processes
- Clarity, precision, and craftsmanship

Introduce “the Design Process,” and methods of working based on Studio Culture, with emphasis on:

- Generation/exploration of ideas and “brainstorming” through modeling, drawing, diagramming, and other methods of making
- Spatial and material investigation through modeling, drawing, diagramming, and other methods of making
- Working iteratively through “trial and error” processes and disciplined repetitions

- Looking at precedents to advance the development of design work
- Describing the qualities and critiquing the strengths and deficiencies in one's own and in others' work
- Actively and constructively participating in and responding to class discussions and critiques
- Sketching as a tool of observation, thinking, and design.

NAAB Performance Criteria Addressed

- A.2 Design Thinking Skills:** *Ability to* raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.
- A.3 Visual Communication Skills:** *Ability to* use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.
- A.6 Fundamental Design Skills:** *Ability to* effectively use basic architectural and environmental principles in design.
- A.8 Ordering Systems Skills:** *Understanding of* the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

Topical Outline (include percentage of time in course spent in each subject area):

Design Thinking Skills: 30%

Fundamental Design Skills: 30%

Visual Communication Skills: 20%

Ordering Systems Skills: 20%

Textbooks/Learning Resources:

Ching, Francis. *Design Drawing*. Second Edition (John Wiley & Sons. 2010)

Various readings selected from the following texts:

Pallasmaa, Juhani. *The Eyes of the Skin* (John Wiley & Sons. 2005)

Allen, Stan. *Practice: Architecture, Technique, and Representation* (OPA. 2000)

Rowe, Colin and Slutsky, Robert. *Transparency; Literal and Phenomenal* (MIT Press, 1976)

Tschumi, Bernard. *Architecture and Disjunction* (MIT Press, 1994)

Evans, Robin. "Translation from Drawing to Building" (1986).

Course Number/Title ARC 102: Immured Vessels

Credits 6

Type of Course Studio

Dates Offered Spring 2013, 2014

Instructor 2013: Georg Rafailidis (Coordinator), Jennifer Oakley, Matthew Hume
2014: Dennis Maher (Coordinator), Karen Tashjian, Matthew Hume

Pre-requisites ARC 101, co-requisite: ARC 112

Course Overview

This course provides a working forum for developing creative thinking and critical awareness in design. It builds upon the skills and objectives of ARC 101, further examining two-dimensional and three-dimensional representation techniques for developing and presenting design concepts. Cognition for formal/spatial relationships is acquired via freehand drawings, orthographic projections, computational drawings, perspective, collage, and design techniques. Model-making skills are further enhanced utilizing various design media. The course leads to a design proposal for a simple building and to the design and construction of a full-scale architectural fragment.

Learning Objectives

- To develop an array of tools and design strategies for generating architecture
- To develop skills and methods of working within studio culture
- To understand organizing principles and systems of assembly in architecture
- To develop an awareness of formal/spatial/material relationships in architecture
- To understand and apply concepts of scale, program and site
- To understand the essential roles that program and site play in the design process
- To understand the process of observation, analysis, synthesis, and implementation
- To develop understanding of basic construction & structural systems and their inherent expressive potential
- To develop collaborative working skills

NAAB Performance Criteria Addressed

A.2 Design Thinking Skills: *Ability to* raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A.3 Visual Communication (Graphic) Skills: *Ability to* use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.

A.6 Fundamental Design Skills: *Understanding to* effectively apply basic architectural, environmental, organizational, spatial, structural, and constructional principles to the conception and development of spaces, building elements, and components.

A.8 Ordering Systems Skills: *Understanding of* the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

- Formal Ordering Systems: 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.

C. 1. Collaboration: *Ability to* work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Design Thinking Skills: 40%

Visual Communication Skills: 20%

Fundamental Design Skills: 40%

Ordering Systems Skills: 20%

Textbooks/Learning Resources:

Robert Venturi, Complexity and Contradiction in Architecture

Course Number/Title	ARC 111 – Media 1
Credits	1
Type of Course	Media
Required/Elective	Required
Dates Offered	Fall 2012, Fall 2013, Fall 2014
Instructors:	Matthew Hume
Prerequisites	Architecture Major, Co-requisite: Arc 101 Design Studio 1

Course Overview

This course introduces beginning students of architecture to the tools, skills, and principles of design and representation. It also develops conceptual thinking and critical awareness in design as well as a hands-on workshop use.

Course Goals & Objectives

- Develop basic skills in the use of tools, materials and techniques
- Develop a sensibility for using various tools and media for architectural investigation.
- Explore and understand the inherent characteristics of materials and media with which one might be working
- Be capable of drawing plans, elevations, sections and axonometrics to explore and develop simple objects and environments
- Understand the meaning and differences between scale and proportion
- Be familiar with basic ordering systems in the layout and formatting of visual communications

NAAB Performance Criteria Addressed

- A.3 Visual Communication Skills:** *Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.*
- A.8 Ordering Systems Skills:** *Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.*

Topical Outline (include percentage of time in course spent in each subject area):

Visual Communication Skills: 90%

Ordering Systems Skills: 10%

Textbooks/Learning Resources:

Ching, Francis. *Design Drawing*. Second Edition (John Wiley & Sons. 2010)

Course Number/Title	ARC 112 – Media 2
Credits	1
Type of Course	Media
Required/Elective	Required
Dates Offered	Spring 2013, Spring 2014
Instructors:	Matthew Hume
Prerequisites	Architecture Major, Co-requisite: Arc 102 Design Studio 2

Course Overview

This course introduces beginning students of architecture to the tools, skills, and principles of design and representation. It also develops conceptual thinking and critical awareness in design as well as a hands-on workshop use.

Course Goals & Objectives

- Continue to develop basic skills in the use of tools, materials and techniques
- Continue to develop a sensibility for using various tools and media for architectural investigation.
- Explore and understand the inherent characteristics of materials and media with which one might be working.
- Continue developing skills in drawing plans, elevations, sections and axonometrics to explore and develop simple objects and environments.
- Develop skills in basic digital media software.
- Continue to develop skills in understanding and utilizing ordering systems in the layout and formatting of visual communications

NAAB Performance Criteria Addressed

- A.3 Visual Communication Skills:** *Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.*
- A.8 Ordering Systems Skills:** *Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.*

Topical Outline (include percentage of time in course spent in each subject area):

Visual Communication Skills: 90%

Ordering Systems Skills: 10%

Textbooks/Learning Resources:

Ching, Francis. *Design Drawing*. Second Edition (John Wiley & Sons. 2010)

Course Number/Title	ARC 121 – Introduction to Architecture
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Credits	3
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Type of Course	Lecture
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Required/Elective	Required
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Dates Offered	Fall 2012, 2013, 2014
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Instructors:	Irene Ayad (2012, 2013), Greg Delaney (2014)
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Pre-requisites	None (open to non-majors)
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Course Overview

A study of aesthetic, technological, behavioral, social, environmental, and legal forces determining architectural forms and urban patterns. Introduction to architectural education and practice in the U.S. A look at architecture as a way of viewing the world in the context of liberal arts education.

Learning Objective

- Broad exposure to forces impacting architectural form and urban patterns.

NAAB Performance Criteria Addressed

- A. 9. Historical Traditions and Global Culture: *Understanding* of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.

Topical Outline (include percentage of time in course spent in each subject area):

Textbooks/Learning Resources:

Course Number/Title	ARC 201 – Design Studio 3: Morphology and Context
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Credits	6
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Type of Course	Studio
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Required/Elective	Required
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Dates Offered	Fall 2012, 2013, 2014
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Instructors:	Fall 2012: Dennis Maher (Coordinator), Greg Delaney, Michael Rogers, Jennifer Oakley, Karen Tashjian, Michael Williams Fall 2013: Georg Rafailidis (Coordinator), Michael Silver, Dennis Maher, Laura Garofalo, Jennifer Oakley, Michael Williams Fall 2014: Georg Rafailidis (Coordinator), Michael Silver, Jordan Geiger, Virginia Melnyk, Stephanie Cramer
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Pre-requisites	ARC 101, ARC 102 2.0 Overall GPA, 2.5 ARC GPA
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Course Overview

The second year of the architecture curriculum has been constructed around the integration of history in the design process. The Fall semester, in alignment with a required course in "Architecture History" concentrates on the use of Precedents. Principles of architecture, more specifically, principles of designing and constructing buildings are explored through the analysis of precedents. In this studio, we have engaged semester-long projects which begin with the analysis of precedents through text, drawings, and models, and continue with the production of architectural proposals of a modest scale that explore the transformation of precedents.

This studio explores the increasingly complex relationship between inhabitation and built form. In practice architecture is triggered by a program, a client's brief or a business plan. In our current economic reality however, the life span of these triggers is getting increasingly short in comparison to the life span of architecture. Retail typologies, like strip malls have an average lifespan of just 15 years. This reality leads to premature redundancy and demolition of buildings. We are interested in the arising misalignments and dilemmas which ask for newly defined relationships between us and the built environment and for a re-evaluation of the role of time in architecture.

Learning Objective

- To familiarize the students with canonical examples of architecture through the study of precedents.
- To develop research and analysis techniques for the study of architectural precedents.
- To develop the intellectual understanding of and the technical proficiency in the principles of designing and constructing buildings.
- To develop criteria for making thoughtful decisions about appropriate types of physical construction and visual communication for specific situations.
- To investigate material/structure/movement/force relationships.
- To develop the ability to engage complex site conditions and related accessibility issues.
- To address the question of *Morphology* (the study of form) through the lens of form vs use and the tension between the two over time. The learning objective is an expanded understanding of the complex relationship between form and use over time and the ability to formulate design proposals that address this issue.

- To address *Context*: Architecture does not exist in a vacuum but is always embedded in a physical, cultural and historical context. We will address siting, legal requirements (life safety, accessibility) and a historical precedent study in the course of the semester. The learning objective is an understanding of these issues and the ability to formulate design proposals that address these issues.

NAAB Performance Criteria Addressed

- A.2 Design Thinking Skills:** *Ability to* raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.
- A.6 Fundamental Design Skills:** *Understanding to* effectively use basic architectural and environmental principles in design.
- A.7 Use of Precedents:** *Ability to* examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.
- A.8 Ordering Systems Skills:** *Understanding of* the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.
- B.4 Site Design:** *Ability to* respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

Topical Outline (include percentage of time in course spent in each subject area):

Drawing, writing, and other representational techniques (60%)

Presentation skills (40%)

Textbooks/Learning Resources:

Blundell Jones, Peter. *Modern Architecture Through Case Studies*, 2002, pp. 47-60, 203-214

Brand, Stewart. *How Buildings Learn*, 1994, pp. 12-51

Hertzberger, Herman. *Space and the Architect: Lesson in Architecture*, 1991, pp. 92-103, 146-151

Latour, Bruno. *Give me a Gun and I will make all Buildings move*, 2008

Eisenman, Peter. *Postfunctionalism*

Häring, Hugo. *The House as Organic Structure*

Rossi, Aldo. *The Architecture of the City*

Course Number/Title	ARC 202 – Design Studio 4: Integration of History
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Credits	6
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Type of Course	Studio
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Required/Elective	Required
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Dates Offered	Spring 2013, 2014, 2015
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Instructors	Spring 2013: Laura Garofalo (Coordinator), Greg Delaney, Nerea Feliz, Thomas Kelley, Dennis Maher, Michael Rogers Spring 2014: Laura Garofalo (Coordinator), Jordan Geiger, Nerea Feliz, Stephanie Davidson, Greg Delaney, Ludovico Centis Spring 2015:
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Pre-requisites	ARC 201 2.0 Overall GPA, 2.5 ARC GPA
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Course Overview

ARC 202: Design Studio 4_Architecture and Landscape addresses the synthesis of architecture and landscape - as a field - through an investigation of morphology and context. The studio will engage a set of villas by fifteenth century Italian architect Andrea Palladio as precedent and site for design intervention. Students will analyze the sites, compositions and spatial orders of these iconic buildings in order to develop relational figure-field strategies for landscapes and buildings. This will lead to a design project on the site of one of Palladio's iconic villas in the Veneto, Italy.

The semester emphasizes conceptualization and critical thinking through both analysis and making (drawing and modeling). Students will begin with studying and analyzing Palladio's architectural principles, their instantiation in his villa designs, as well as their interpretations. This will provide the basis to develop strategies for organizing landscapes and buildings. Concepts that we will examine include figure/field relations, inside/outside, and the development of spatial boundaries. Students will design a collection of buildings and landscape interventions that reveal the impact of physical, intellectual, and historical context on architectural form, space, and structure.

The semester project will culminate in the design of a landscape and an Institutional building(s) on the site of one of Palladio's villas. The program will cover an equivalent amount of enclosed space and outdoor space.

The studio involves reading of assigned texts, attending lectures, engaging discussions with active participation, analysis, design, digital and analog modeling and 2-d representation, and oral and visual presentation of work.

Learning Objectives

- To understand the relevance of historical, social, physical context in architectural design
- To introduce historically vetted principles of architectural and landscape composition, their interpretation and transformation over time, and their relevance to contemporary design through precedent analysis and interpretation
- To enable morphological transformation
- To understand materials, methods, tools, and conventions of architectural and site design
- To develop parallel design strategies at site and building scales
- To address the relation of public and private space
- To enable thinking about passive environmental systems and strategies
- To enable integration of accessibility strategies in the design process
- To further develop skills in representational modeling and 2-d graphic skills

NAAB Performance Criteria Addressed

- A.2 Design Thinking Skills:** *Ability to* raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.
- A.3 Visual Communication Skills:** *Ability to* use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.
- A.6 Fundamental Design Skills:** *Understanding to* effectively use basic architectural and environmental principles in design.
- A.7 Use of Precedents:** *Ability to* examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.
- A.8 Ordering Systems Skills:** *Understanding of* the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.
- B.2 Accessibility:** *Ability to* design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities
- B.4 Site Design:** *Ability to* respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

Topical Outline (include percentage of time in course spent in each subject area):

Site Analysis	10%
Precedent Analysis	10%
Field Development and conceptualization	15%
Design proposal (Site and Building)	50%
Preparation of materials (drawings, models, images) for final presentation	15%

Textbooks/Learning Resources:

- Ackerman_Palladio
- Alberti_The Ten Books of Architecture
- Allen_ "From object to Field"
- Aureli_The Possibility of an absolute architecture. "Geopolitics of the Ideal Villa"
- Cosgrove_The Palladian Landscape 3
- Eisenman_"Representations of Doubt"
- Evans_ "Paradoxical Symmetries"
- Lynn_"Novelty of Symmetry"
- Palladio, The Four Books of Architecture.
- Rowe_ "The Mathematics of the Ideal Villa"
- Rasmussen_Experiencing Architecture
- Smienk_Palladio, the Villa and the Landscape
- Wittkower_Architectural Principles in the Age of Humanism

Course Number/Title ARC 211 – Diversity and Design

Credits	3
Type of Course	Lecture and general education American Pluralism cognate
Required/Elective	Required
Dates Offered	Spring 2013, Spring 2014
Instructors:	2013: Beth Tauke 2014: Mary Jane Carroll

Prerequisites**Course Overview**

The Diversity and Design course focuses on the relationship of design to the changing nature of our society in the U.S. It examines the history and diversity of cultural experiences and their attendant design issues. Specifically, the course concentrates on the ways in which our physical and media environments affect various populations in the U.S. and, in turn, the ways these populations have affected our environments. It introduces students to eight issues of diversity: race, ethnicity, gender, class, age, physical characteristics, cognitive characteristics, and religion. Writings, films, products, graphics, electronic media, buildings and environments by and about diverse individuals and groups are examined. The history of our diverse physical and media environments are analyzed using theories and principles related to inclusive design.

Course Goals & Objectives

- Introduce the various design disciplines and their history, specifically in (but not limited to) the U.S.
- Raise awareness of the impact of design decisions on diverse populations throughout U.S. history.
- Raise awareness of the impact of various U.S. populations on design practices
- Build a vocabulary that demonstrates an understanding of diversity in relation to various design methods
- Analyze specific aspects of physical and visual environments keeping in mind the needs of diverse groups
- Critically examine design practices in the U.S.
- Use the course topics to refine critical thinking and writing skills
- Develop design processes and proposals for inclusive physical and visual environments

NAAB Performance Criteria Addressed

- **A.10. Cultural Diversity:** *Understanding* of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.
- **C. 2. Human Behavior:** *Understanding* of the relationship between human behavior, the natural environment and the design of the built environment.
- **C.9. Community and Social Responsibility:** *Understanding* of the architect's responsibility to work in the public interest, to respect historic resources and to improve the quality of life for local and global neighbors.

Topical Outline (include percentage of time in course spent in each subject area):

Cultural Diversity: 40%

Human Behavior: 30%

Community and Social Responsibility: 30%

Textbooks/Learning Resources:

Excerpts from:

American Design Ethic – A. Pulos

Letters of the Century, L. Grunwald and S.J. Adler, eds.

Design Like You Give A Damn: Architectural Responses To Humanitarian Crises, K. Stohr, C. Sinclair

Sites of Memory: Perspectives on Architecture and Race, C.E. Barton, ed.

Designing for Diversity - K. H. Anthony

Media Society - D. Croteau and W. Hoynes

Gender, Race, and Class in Media – G. Dines and J.M. Humez, eds. *Media Messages* – L. Holtzman

In Search of New Public Domain - M Hajer, A. Reijndorp

Planet of the Blind – S. Kuusisto

Sexuality and Space – B. Colomina

A Feminist Critique of the Man Made Environment – L. Weisman *If You Lived Here* - B. Wallis

Universal Design Handbook - W. Preiser and Korydon Smith (editors)

TEDTalks

This American Life – WBEZ Chicago - I. Glass (commentator)

Universal Design Education Online www.udeducation.org

Various websites, media programs

Course Number/Title	ARC 231/531 – Introduction to Architectural History I: Prehistory to 1450
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Credits	4
Type of Course	Lecture with weekly discussion sessions
Required/Elective	Required
Dates Offered	Fall 2012 through 2014
Instructors:	David Salomon (2012), Greg Delaney (2013), Despina Stratigakos (2014)
Pre-requisites	English 101 & 201

Course Overview

This course provides an overview of architecture and ideas of building and community form in major world cultures from the Neolithic era to 1450 C.E. Paying close attention to the social and intellectual contexts in which architecture is produced, we will study the design of built environments at particular times and places, exploring dynamics of continuity, transformation, and exchange on local, regional, national, and international levels. The theory and politics of interpretation and preservation will be emphasized throughout the semester as we examine how architectural narratives are created, sustained, and challenged.

Learning Objective

- To provide students with an intellectual understanding of the history and theory of architectural production and form, including the social, cultural, political, and economic discourses which shape them.
- To develop research and analysis techniques for the study of architectural precedents, as well as the ability to express that analysis in writing.
- To familiarize the students with canonical and non-canonical examples of architecture, create a critical understanding of the processes of architectural history as a discipline that create that canon, and introduce them to the broader social, cultural, political, and economic contexts that shape the forms, practices, and meanings of architecture.

NAAB Performance Criteria Addressed:

- A.1 Communication Skills:** *Ability to read, write, speak and listen effectively.*
- A.2 Design Thinking Skills:** *Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.*
- A.5 Investigative Skills:** *Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.*
- A.9 Historical Traditions and Global Culture:** *Understanding of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.*
- A.10 Cultural Diversity:** *Understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.*
- C.2 Human Behavior:** *Understanding of the relationship between human behavior, the natural environment and the design of the built environment.*

Topical Outline (include percentage of time in course spent in each subject area):

Communication skills: 15%

Design Thinking Skills: 10%

Investigative Skills: 15%

Historical Traditions and Global Culture: 40%

Cultural Diversity: 20%

Textbooks/Learning Resources:

The reader is composed of thirty-one scholarly texts drawn from a wide range of disciplines, including architectural history, social history, archaeology, and urban studies, which demonstrate a range of methodologies for the students and introduce them to the importance of different forms of disciplinary scholarship and the role of interpretation.

Course Number/Title	ARC 234/534 – Introduction to Architectural History II: 1450 to the Present
Credits	4
Type of Course	Lecture with weekly discussion sessions
Required/Elective	Required
Dates Offered	Spring 2013, Spring 2014
Instructors:	David Salomon (2013), Hadas Steiner (2014)
Pre-requisites	ARC 231/531, English 101 & 201

Course Overview

This course provides an overview of architecture and ideas of building and community form in major world cultures from 1450 to the present. Paying close attention to the social and intellectual contexts in which architecture is produced, we will study the design of built environments at particular times and places, exploring dynamics of continuity, transformation, and exchange on local, regional, national, and international levels. Research tools and the theory and politics of interpretation will be emphasized throughout the semester as we examine how architectural narratives are created, sustained, and challenged.

Learning Objective

- To provide students with an intellectual understanding of the history and theory of architectural production and form, including the social, cultural, political, and economic discourses which shape them.
- To develop research and analysis techniques for the study of architectural precedents, as well as the ability to express that analysis in writing.
- To familiarize the students with canonical and non-canonical examples of architecture, create a critical understanding of the processes of architectural history as a discipline that create that canon, and introduce them to the broader social, cultural, political, and economic contexts that shape the forms, practices, and meanings of architecture.

NAAB Performance Criteria Addressed:

- A.1 Communication Skills:** *Ability to read, write, speak and listen effectively.*
- A.2 Design Thinking Skills:** *Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.*
- A.5 Investigative Skills:** *Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.*
- A.9 Historical Traditions and Global Culture:** *Understanding of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.*
- A.10 Cultural Diversity:** *Understanding of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.*

Topical Outline (include percentage of time in course spent in each subject area):

Communication skills: 15%
Design Thinking Skills: 10%
Investigative Skills: 20%
Historical Traditions and Global Culture: 40%

Cultural Diversity: 15%

Textbooks/Learning Resources:

Kostof, Spiro. *A History of Architecture: Settings and Rituals*. 2nd ed. New York: Oxford University Press, 1995.

Additionally, ten extra readings that provide a theoretical approach to issues in architectural history concerning the role of gender, colonialism, and technologies of control, among other themes.

Course Number/Title	ARC 241/541 – Introduction to Building Technology
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Credits	3
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Type of Course	Lecture
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Required/Elective	Required
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Dates Offered	Fall 2012 through Fall 2014
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Instructor:	Laura Garofalo (2012, 2013) Nick Rajkovich (2014)
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Prerequisites	None
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Course Overview

As an introductory overview for the 'technics' sequence of the professional architecture program at UB, this course explores the interrelationship of environment and building -- specifically construction, structures and environmental controls -- as each relate to design and the natural/built environment. The course is intended to provide students with a foundation and working vocabulary for the basic principles grounded in physical design and technological necessity.

Learning Objectives

- To be aware of the basic principles of natural order and theories of structure, elements of environmental control and construction materials and assemblies.
- To understand the interrelationship between the natural and built environments, including responsibility to global issues, sustainable concepts, and the ecological impact of buildings and their occupants.
- To be aware of the assessment, selection and integration of structural, environmental and construction systems as they relate to design decision making and built form.

NAAB Performance Criteria Addressed

- B.3** Sustainability: *Ability* to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.
- B.4** Site Design: *Ability* to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.
- B.5** Life Safety: *Ability* to apply the basic principles of life-safety systems with an emphasis on egress.
- B.8** Environmental Systems: *Understanding* the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.
- B.10** Building Envelope Systems: *Understanding* of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.
- B.12** Building Materials and Assemblies: *Understanding* of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

Topical Outline (include percentage of time in course spent in each subject area):

Natural systems and site design 35%
Passive and active systems design 20%
Materials and tectonics 10%
Designing with climate 20%
Building Service Systems 10%
Building envelope 5%

Textbooks/Learning Resources:

1. Allen, E. (2004). *How Buildings Work: the natural order of architecture*. 3rd ed. Oxford: Oxford University Press.
2. Lynch, K., Hack, G. (1984). *Site Planning*. 3rd ed. Cambridge, Mass.: MIT Press.

Excerpts from the following books:

1. Grondzik, W. T., Kwok, A. G., Stein, B., Reynolds, J. (2010). *Mechanical and electrical equipment for buildings*. 11th ed. Hoboken, N.J.: Wiley.
2. Kwok, A. G., Grondzik, W. T. (2011). *Green studio handbook: environmental strategies for schematic design*. 2nd ed. Amsterdam: Architectural Press/Elsevier.
3. Lynch, K. (1960). *The image of the city*. Cambridge [Mass.]: MIT Press.
4. McHarg, I. L. (1969). *Design with nature*. [1st ed.] Garden City, N.Y.: Published for the American Museum of Natural History [by] the Natural History Press.
5. Nye, D. E.. (1998). *Consuming power: a social history of American energies*. Cambridge, Mass.: MIT Press.
6. Rome, A. Ward. (2001). *The bulldozer in the countryside: suburban sprawl and the rise of American environmentalism*. Cambridge: Cambridge University Press.
7. Whyte, W. Hollingsworth. (1980). *The social life of small urban spaces*. Washington, D.C.: Conservation Foundation.

Course Number/Title	ARC 301 – Architectural Design Studio 5
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Credits	6
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Type of Course	Studio
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Required/Elective	Required
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Dates Offered	Fall 2012 through Fall 2014
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Instructors:	Fall 2012: Joyce Hwang (Coordinator); Martha Bohm, Gregory Serweta, Stephanie Vito, Nick Bruscia Fall 2013: Nerea Feliz (Coordinator); Sean Burkholder, James Rayburg, Ludovico Centis, Nick Bruscia Fall 2014: Jin Young Song (Coordinator); Erika Abbondanzieri, Miguel Guitart, Jordan Carver, Anne Dafchik
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Pre-requisites	ARC 202 2.0 Overall GPA, 2.5 ARC GPA
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Course Overview

Witnessing the depletion of public urban culture and pedestrian life in economically declining cities such as Buffalo, the studio aims to develop design projects that address the following considerations: 1. How architecture can impact both the street and the city to revitalize the public activity and pedestrian life, 2. How developing the program for a Wellness Center can be configured architecturally to promote/present healthy life as a cultural destination around the site, 3. How the design for a building's façade and its structural and environmental systems can integrate with overall building design tactics to pursue above missions, in which healthy relationships between physical and metaphysical components can then be compared to the integration of façade, form and program.

Learning Objectives

- Preparing, organizing, and developing a building program based on assessing user needs/desires/criteria and conducting inventories of required spatial, environmental and urban conditions.
- Analyzing site parameters and exploring the criticality of siting and site design in the process of developing a building project. Understanding the existing zoning regulation, you will have limited flexibility to help your argument.
- Exploring productive research methods that enable you to build a knowledge base on the topics and issues at hand.
- Experimenting with *architectural models* in the design process.
- Experimenting with *architectural diagrams* in the design process.
- The studio will introduce *sustainable building* and site practices with an emphasis on active and passive environmental systems.
- The studio will introduce *structural system* with an emphasis on the integration of façade, form and program.

NAAB Performance Criteria Addressed

A. 2. Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A.5. Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A. 6. Fundamental Design Skills: Ability to effectively use basic architectural and environmental principles in design.

A. 7. Use of Precedents: Ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.

B. 1. Pre-Design: Ability to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.

B. 2. Accessibility: Ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

B. 3. Sustainability: Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.

B. 4. Site Design: Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

B. 5. Life Safety: Ability to apply the basic principles of life-safety systems with an emphasis on egress.

Topical Outline (include percentage of time in course spent in each subject area):

- Precedent Analysis (10%)
- Site Analysis/Research (10%)
- Building Project Development (80%)
 - Predesign/Programming
 - Envelope design
 - Structure diagram
 - Sustainability diagram
 - Accessibility/Life Safety diagram

Textbooks/Learning Resources:

(recommended reading list)

- Jacobs, Jane. *The death and life of great American cities*. Random House LLC, 1961.
 - Lynch, Kevin. *The image of the city*. Vol. 11. MIT press, 1960.
 - Koolhaas, Rem. *Delirious New York: a retroactive manifesto for Manhattan*. New York: Monacelli Press, 1994.
 - Sullivan, Louis H. "The tall office building artistically considered." *Lippincott's Magazine* 57, no. 3 (1896): 406
 - Loos, Adolf. *Ornament and crime: selected essays*. Edited by Adolf Opel. Riverside, CA: Ariadne Press, 1998.
 - Aureli, Pier Vittorio. "The Thickness of the Façade", *El Croquis* 166 Caruso St John (2013): 23-39
 - Picon, Antoine. *Ornament: The Politics of Architecture and Subjectivity-AD Primer*. John Wiley & Sons, 2014.
- And more on the syllabus

Course Number/Title	ARC 302- Comprehensive Design studio 6
Credits	6
Type of Course	Studio
Required/Elective	Required
Dates Offered	Spring 2013 through 2014
Instructors:	<p><i>Spring 2013</i> Kenneth MacKay(coordinator) Brian Carter Sergio Lopez-Pineiro Christopher Romano Brad Wales</p> <p><i>Spring 2014</i> Kenneth MacKay(coordinator) Brian Carter Jin Young Song Christopher Romano Brad Wales</p>
Prerequisites:	ARC 301 and satisfaction of GPA requirements for continuation in the Architecture Program.

Course Overview

This semester of the Junior Studio is intended to focus students' design inquiry on the development and refinement of the ability to generate architectural designs based on a deeper and more qualitative understanding of architectural space. The specific spatial qualifiers that we will address in the studio are the topics of site, office working environments, structural systems, and the interaction of various building systems. Each of these topics will be examined to explore interrelationships of the various systems which comprise a building.

The contemporary building includes a vast array of systems: structural, heating, ventilating, plumbing, electrical, fire protection, envelope and enclosure. Each system brings its own discipline and therefore its own ordering systems and priorities. The act of bringing together parts of buildings in a coherent, orderly composition or not is a fundamental question in contemporary architecture. The choices about which orderly or disorderly manner the various systems of a building are brought together are important for students to consider in their design projects. In your previous studios you have explored the process by which to make design decisions. In this studio we will expand the number of systems and variables which are to be included in the design. In addition, we will explore how various performance metrics, such as Ecotect and Radiance, may be used to facilitate the architects design decision making process while sorting through the often contradictory requirements of various systems.

Course Objectives

- To ***develop*** the ability to formulate a site-specific architectural proposal within a **conceptual framework that works at many scales**, from the city to the detail.
- To ***sharpen*** a critical awareness of **the interaction between aesthetic, technical, social, cultural, political and economic values** in the shaping of architecture and urban design.

- To **investigate** conventions regarding **public and private space** in the city.
- To **explore** relationships between **form and meaning**, type and context, function and materiality.
- To **understand** the formal, spatial and conceptual potential of **materials and construction assemblies**.
- To **refine** skills of verbal and visual presentation.

NAAB Performance Criteria Addressed

B.6 Comprehensive Design: *Ability to produce a comprehensive architectural project that demonstrates each student's capacity to make design decisions across scales while integrating the following Student Performance Criteria:*

A.2 Design Thinking Skills: *Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.*

A.4. Technical Documentation: *Ability to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.*

A.5 Investigative Skills: *Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.*

A. 8. Ordering Systems Skills: *Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.*

A. 9. Historical Traditions and Global Culture: *Understanding of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.*

B.2 Accessibility: *Ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.*

B. 3. Sustainability: *Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.*

B.4 Site Design: *Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.*

B.5 Life Safety: *Ability to apply the basic principles of life-safety systems with an emphasis on egress.*

B. 8 Environmental Systems: *Understanding the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.*

B. 9. Structural Systems: *Understanding* of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.

Topical Outline (include percentage of time in course spent in each subject area):

Participation / attitude / focus		5%
PROJECT ONE	Precedent Analysis	10%
PROJECT TWO	Site Model, Documentation & History	10%
PROJECT THREE	Scheme Design	40%
PROJECT FOUR	Systems/Structure/Envelope	25%
PROJECT FIVE	Final Presentation Requirements	10%

Course Number/Title	ARC 311 Arch Media 3
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Credits	1
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Type of Course	Lecture & Lab
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Required/Elective	Required
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Dates Offered	Fall 2012 through Fall 2014
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Instructors:	Dennis Maher (2012), Michael Williams (2013), Stephanie Cramer (2014)
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Pre-requisites	Pre-Requisite : ARC 112, Co-Requisite : ARC 201
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Course Overview

The act of drawing teaches one to see, whereas drawing what is not immediately seen, teaches one how to think. In this course, students will learn how to see, draw, and ultimately think; like an Architect.

This course is meant to build upon both hand and computer aided drawing skills. We will explore techniques of representation with emphases on the description of part/whole relationships: objects and their contexts. Course assignments will develop a range of analogue and digital skills including: use of diagrams, generate and manipulate relationships between objects and their contexts, proficiency in descriptive representation, post-processing, and basic modeling.

Learning Objective

In addition to practicing hand and computer drawing skills, the goal of this course is to generate high quality and visually rich architectural drawings and related imagery.

NAAB Performance Criteria Addressed

A3 : Visual Communications

Topical Outline (include percentage of time in course spent in each subject area):

Part / Whole Relationships : 15%
Diagrams as Design Instruments : 20%
Descriptive Drawings / Presentation Graphics : 20%
Basic 3d Modeling / Basic Rendering : 15%
Post-Processing Techniques : 30%

Textbooks/Learning Resources:

Ching, Francis. Architectural Graphics, 2009. Cooper, Douglas. Drawing and Perceiving: Real-world Drawing for students of Architecture and Design, 2007

Course Number/Title	ARC 312 – Media 4: Digital to Analog
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Credits	1
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Type of Course	Lab
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Required/Elective	Required
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Dates Offered	Spring 2013, 2014
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Instructors	Laura Garofalo
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Pre-requisites	ARC 201, 311, Co-requisite, ARC202
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Course Overview

ARC312: Media 4 will address the development of formal organization through digital and analog modeling. The class will use and interpretation of line, surface, volume and color in modeling. Lectures, workshops and assignments will demonstrate and apply digital modeling using Rhinoceros to four modeling output tools: Laser cutting, CNC milling, 3D-printing, and Rendering. How do models produced with each of these outputs differ in development and design process?

Workshops in V-ray for Rhino produce basic renders which will be processed through digital and analog media to produce a final render that is one of the final requirements for ARC202. In addition, targeted exercises develop the students' abilities to work with color, collaboratively develop modeling strategies, collaborate on digital files, and explore the sketch as a medium of both documentation and communication of ideas.

Learning Objectives

This course introduces students to digital modeling and its physical output. The course objectives are:

- To further develop skills in digital and analog modeling using Rhino and 2-d graphic skills
- To model using laser cutter, CNC route, 3D printer technology
- Digital rendering
- Post processing of digital renderings

NAAB Performance Criteria Addressed

A.3 Visual Communication Skills: *Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.*

Topical Outline (include percentage of time in course spent in each subject area):

3-D Modeling	20%
Planar model-Lase cutter	20%
Volumetric Model- CNC	20%
Linear Model – 3dPrint	20%
Rendering Model	20%

Textbooks/Learning Resources:

Rhino 5 Users Guide <http://www.rhino3d.com/download/rhino/5.0/UsersGuide>

Level 1 Manual <http://files.na.mcneel.com/rhino/5.0/docs/en/Rhino%20Level%201%20v5.pdf#page=1>

Level 2 Manual <http://www.rhino3d.com/download/rhino/5.0/Rhino5Level2Training/>

Rhino Hidden Secrets <http://wiki.mcneel.com/rhino/hiddensecrets>

Course Number/Title	ARC 352/552 – Structures 1
Credits	3
Type of Course	Lecture
Required/Elective	Required
Dates Offered	Spring 2013, Spring 2014
Instructors:	Peter Grace (2013,2014)
Pre-requisites	ARC 241/541 – Introduction to Building Technology Permission of Instructor

Course Overview

This is an introduction to the fundamentals of statics and strength of materials. The course provides a theoretical and scientific basis in understanding how various structural systems and structural materials work and withstand loading. The concepts introduced during the course will be investigated with analytical analysis of theoretical and practical applications.

Learning Objective

- To develop an understanding of statics, the strength of materials, and structural systems such as trusses, beams, columns, cables and arches

NAAB Performance Criteria Addressed

B. 9. Structural Systems: *Understanding* of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.

Topical Outline (include percentage of time in course spent in each subject area):

Vector Algebra	15%
Static Equilibrium	15%
Truss Behavior	19%
Elasticity	5%
Moment of Inertia	5%
Beam Behavior	22%
Column Buckling	7%
Arches & Cables	5%
Rigid Frames	7%

Textbooks/Learning Resources:

A Structures Primer, by Harry Kaufman, Pearson
RISA 2-D Analysis Software, Educational Version

Course Number/Title	ARC 362/562 – Arch Theory
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Credits	2
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Type of Course	Seminar
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Required/Elective	Required
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Dates Offered	Fall 2013, Fall 2014
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Instructors:	Hadas Steiner
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Pre-requisites	Majors/Minors Only
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Course Overview

This lecture course focuses on selected topics that have characterized architectural theory since the modern era and the vehicles used to disseminate architectural ideas, from the rise of the manifesto to the foundation of magazines dedicated to architectural theory to the expansion of the internet. It covers the development of a modernist discourse and, in turn, the trends that arose in reaction to it after the second world war. We will then turn towards porousness of architectural theory to other fields, especially after the revolutionary events of 1968, including aesthetic theory, politics, technology, structuralism, philosophy and biology.

Learning Objective

- To provide students with an intellectual understanding of the role of theory in architectural design, including the social, cultural, political, and economic discourses that shape it.
- To develop research and analysis techniques for the study of architectural culture, as well as the ability to express that analysis in writing.
- To familiarize the students with canonical and non-canonical examples of architectural thinking, create a critical understanding of the processes of architectural theory as a discipline that create that canon of ideas, and introduce the broader social, cultural, political, and economic contexts that shape the forms, practices, and meanings of architecture.

NAAB Performance Criteria Addressed

- A.1 Communication Skills:** *Ability to read, write, speak and listen effectively.*
- A.2 Design Thinking Skills:** *Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.*
- A.5 Investigative Skills:** *Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.*
- A.9 Historical Traditions and Global Culture:** *Understanding of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.*

Topical Outline (include percentage of time in course spent in each subject area):

Communication skills: 30%
Design Thinking Skills: 30%
Investigative Skills: 10%
Historical Traditions and Global Culture: 30%

Textbooks/Learning Resources:

Selections of primary texts predominantly drawn from:

1. Harry Francis Mallgrave, ed., *Architectural Theory, Volume 1: An Anthology from Vitruvius to 1870* (Oxford: Blackwell Publishing, 2006).
2. Harry Francis Mallgrave, ed., *Architectural Theory, Volume 2: An Anthology from 1871-2005* (Oxford: Blackwell Publishing, 2008).
3. Ulrich Conrads, ed., *Programs and Manifestoes on 20th-century Architecture*, (Cambridge, MA: MIT Press, 1970).
4. Joan Ockman, ed., *Architecture Culture 1943-1968: A Documentary Anthology* (NY: Rizzoli, 1993).

Course Number/Title	ARC 403 – Design Studio 7: Urban Housing
Credits	6
Type of Course	Studio
Required/Elective	Required
Dates Offered	Fall 2012 through Fall 2014
Instructors:	Annette LeCuyer (Coordinator 2012) Sergio Lopez-Pineiro, Brad Wales, Harry Warren, Nerea Feliz, Ken MacKay Annette LeCuyer (Coordinator 2013) Harry Warren, Jin Young Song, Brad Wales Annette LeCuyer (Coordinator 2014) Erkin Ozay, Harry Warren, Brad Wales
Pre-requisites	ARC 301, ARC 302, ARC 311 2.0 Overall GPA, 2.5 ARC GPA

Course Overview

Because of its collective character, one of the challenges of the city is the balance between the public and private realms, an issue that becomes central in the design of urban housing. **This semester focuses on the urban dwelling as a threshold between self and society.** Work during the semester will be informed by engagement with urban issues, history and culture as well as materiality and craft.

Learning Objectives

To **develop** the ability to formulate a site-specific architectural proposal within a **conceptual framework that works at multiple scales**, from the city to the detail.

To **sharpen** critical awareness of **the interaction between aesthetic, technical, social, cultural, political and economic values** in the shaping of architecture.

To **investigate** conventions regarding **public and private space** in the city.

To **explore** relationships between **form and meaning**, type and context, function and materiality.

To **understand** the formal, spatial and conceptual potential of **materials and construction assemblies** and the **interplay of multiple ordering systems**.

To **refine** skills in research, representation and verbal communication.

NAAB Performance Criteria Addressed

A. 2. Design Thinking Skills: *Ability to* raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A.5. Investigative Skills: *Ability to* gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

B. 1. Pre-Design: *Ability* to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

C. 2. Human Behavior: *Understanding* of the relationship between human behavior, the natural environment and the design of the built environment.

Topical Outline (include percentage of time in course spent in each subject area):

Design + production		85%
research/concept development	(25%)	
scheme design	(30%)	
design development	(30%)	
Competition presentation		15%

Textbooks/Learning Resources:

The studio includes a series of short lectures on critical topics (see outlines).

The main resource for relevant aspects of the building code:

Allen, Edward and Iano, Joseph. *The Architect's Studio Companion* (Wiley & Sons, fourth/fifth editions).

A bibliography of materials on reserve in the library (case studies, typology studies, tectonic details) is made available to the students.

Course Number/Title	ARC 404 – Competition + Collaboration
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Credits	3
Type of Course	Studio.
Required/Elective	Required
Dates Offered	Spring 2013, Spring 2014
Instructors	Brian Carter, Michael Williams
Pre-requisites	ARC 403 – comprehensive studio

Course Overview:

This course seeks to advance architectural design skills, develop collaborative ways of working between students and build communication skills through the focused use of words and images. Students enrolled in the class will be asked to work together to research a particular building type, study specific materials and explore techniques of construction in the preparation of a design proposal outlined by an international design competition.

The ACSA Design Competition will provide the basis for the course.

Learning Objectives:

- Ability to develop ideas
- Understand material qualities
- Ability to work collaboratively
- Ability to communicate ideas

NAAB Performance Criteria Addressed:

A.2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A.5 Investigative Skills: Ability to gather, assess, record, apply and comparatively evaluate relevant information with architectural coursework and design processes.

Topical outline (include percentage of time in course spent in each subject area):

Exploration in Case Studies (20%)

Develop design proposal.(40%)

Presentation of design proposal (20%)

Textbooks/Learning Resources:

Making. Thomas Heatherwick, Thames & Hudson, 2012.

Design Engineering. AKT, Actar, 2008.

Steel & Beyond, New strategies for metal in architecture. Annette W. LeCuyer, Birkhauser, 2003.

An engineer imagines. Peter Rice, Artemis, 1993.

Building for industry. Kurt Ackermann, Watermark Publications Ltd.,1991.

Course Number/Title	ARC 411 – Arch Media 5
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Credits	1
Type of Course	Lecture & Lab
Required/Elective	Required
Dates Offered	Fall 2012 through Fall 2014
Instructors:	Nick Bruscia
Pre-requisites	None

Course Overview

This course is intended to introduce students to various computational design applications, through both a lecture and a lab component. The lecture portion will provide students with a historical, conceptual, and technical body of information that will supplement the digital tools learned in the lab and offer a context within which the digital tools introduced can be understood.

Content within both the lectures and lab sessions will include topics such as image processing, vector drawing, 3D modeling, Parametric Modeling, Building Information Modeling (BIM) and rendering techniques. Lab sessions are held weekly with the intention to provide students with hands-on instruction to assist in developing a comfortable skill level with the following software packages: Rhinoceros 4, AutoCAD 2010, MentalRay renderer (3DS Max Design 2010), Grasshopper V 0.8xx, Revit Architecture 2010, as well as the most current Adobe Suite.

Learning Objective

- Introduce students to the basic theoretical concepts of computer graphics.
- Introduce students to skills for producing architectural representations through several forms of digital media.
- Introduce students to various computer applications as they pertain to design, fabrication, and professional practice.

NAAB Performance Criteria Addressed

A. 3. Visual Communication Skills: *Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.*

Topical Outline (include percentage of time in course spent in each subject area):

Drawing and other representational techniques (60%)

Presentation skills (40%)

Textbooks/Learning Resources:

Textbooks: None

Online resources:

www.arc411611.blogspot.com (course website from 2010)

www.kindsofways.info (current course website - 2011)

Others may include:

www.digitaltoolbox.info

<http://designreform.net/>

<http://www.designalyze.com/>

Course Number/Title	ARC 412 – Arch Media 6
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Credits	1
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Type of Course	Lecture & Lab
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Required/Elective	Required
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Dates Offered	Fall 2012 through Fall 2014
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Instructors:	Nick Bruscia (2012), Jin Young Song (2013)
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Pre-requisites	None
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Course Overview

Modern architecture's obsession with transparency and abstraction has haunted every city. Office buildings in Miami are similar to the ones in Buffalo, despite the significant climate difference. In the context of the contemporary building industry, building envelopes still can be developed to provide better sustainability and iconography of the contemporary city. As a mode of searching solutions, we will explore the potential of a parametric tool (**Grasshopper**) and an analytical tool (**Diva**) in order to produce dynamic façade designs.

Learning Objective

- To explore the potential of parametric tool as integrating mechanism of structure, sustainability and iconography
- To understand Grasshopper(6 weeks) and Diva(2 weeks) as design tools

NAAB Performance Criteria Addressed

A. 3. Visual Communication Skills: *Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.*

Topical Outline (include percentage of time in course spent in each subject area):

- Class participation 20%
- Weekly projects (Drawing and other representational techniques) 60%
- Final design project (Drawing and Presentation skills) 20%

Textbooks/Learning Resources:

Textbooks: None

Online resources:

<http://www.grasshopper3d.com/>

<http://www.liftarchitects.com/blog/2009/3/25/grasshopper-primer-english-edition>

<http://diva4rhino.com/>

Course Number/Title	ARC 442/542 – Construction Technology
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Credits	4
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Type of Course	Lecture
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Required/Elective	Required
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Dates Offered	Spring 2013, Spring 2014
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Instructors:	Annette LeCuyer
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Pre-requisites	ARC 241 – Introduction to Building Technology ARC 371 – Environmental Controls
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Course Overview

This course focuses upon the understanding of construction materials, systems and integrated design. Through the careful study of buildings exhibiting a significant integration of design concept, building systems and tectonics, students develop an appreciation for the value of fully resolved execution. The presentation and discussion of basic construction techniques seeks to locate architecture at the juncture of intentions, strategies and technical means.

Learning Objectives

- Information: to introduce construction materials, systems and the concept of integrated design for both small and large scale construction.
- Intention: to demonstrate how architects select and manipulate standard materials and systems to support particular conceptual strategies.
- Application: to apply the material presented in lectures to the understanding of construction documents and the development three-dimensional technical drawings.

NAAB Performance Criteria Addressed

A. 3. Visual Communication Skills: *Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.*

A.4. Technical Documentation: *Ability to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.*

B. 10. Building Envelope Systems: *Understanding of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.*

B. 12. Building Materials and Assemblies: *Understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.*

Topical Outline (include percentage of time in course spent in each subject area):

Lectures, readings, and exams: 30%

Technical drawing assignments: 70%

Textbooks/Learning Resources:

Allen, Edward and Joseph Iano. *Fundamental of Building Construction, Materials and Methods*, Sixth Edition. (Wiley).

Ching, Francis D.K. Ching. *Building Construction Illustrated*, Fourth Edition (Wiley).

Course Number/Title	ARC 453/553 – Structures 2
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Credits	3
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Type of Course	Lecture & Lab
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Required/Elective	Required
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Dates Offered	Fall 2012-2014
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Instructors:	2012, 2013: Peter Grace P.E., 2014: Craig Alexander
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Pre-requisites	ARC 352/552 – Structures 1
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Course Overview

This is the second course in the structures sequence. This course concentrates on the study and design of various structural materials, connections and details. Students will study various design criteria for specific materials such as timber, steel and concrete. There will also be an introduction to the proper use of building codes in the structural design process.

Learning Objective

- To develop an understanding of various structural materials, structural codes and structural design

NAAB Performance Criteria Addressed

B.9 Structural Systems: *Understanding* of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.

B.12 Building Materials and Assemblies: *Understanding* of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

Topical Outline (include percentage of time in course spent in each subject area):

Loading Criteria	13%
Wood Design	23%
Structural Steel Design	27%
Concrete Design	27%
Floor Systems	5%
Lateral Force Systems	5%

Textbooks/Learning Resources:

Simplified Engineering for Architects and Builders, by James Ambrose and Patrick Tripeny, Wiley
ASCE-7 Minimum Design Loads for Buildings and other Structures
AISC Manual of Steel Construction
ACI-318 Building Code Requirements for Reinforced Concrete

Course Number/Title	ARC 473/573 – Environmental Controls 1
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Credits	3
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Type of Course	Lecture
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Required/Elective	Required
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Dates Offered	Spring 2013-2014
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Instructors:	Martha Bohm
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Pre-requisites	ARC 241/541 – Introduction to Building Technology
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Course Overview

An introduction to the theory of operation and the application of appropriate environmental control systems for buildings. Topics include: sustainability, passive systems, HVAC, plumbing, fire protection, life safety, electrical and conveying systems; review of relevant regulatory agency requirements.

Learning Objective

- To develop an understanding of the principles underlying energy usage in buildings, particularly for space conditioning.
- To develop an understanding of the passive / active systems used to provide inhabitable spaces.
- To develop an understanding of the integration of passive / active systems in architectural design.
- To develop an awareness of the relationship between environmental systems and sustainability.

NAAB Performance Criteria Addressed

B.3 Sustainability: *Ability* to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.

B.5 Life Safety: *Ability* to apply the basic principles of life-safety systems with an emphasis on egress.

B.8 Environmental Systems: *Understanding* the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.

B.11 Building Service Systems: *Understanding* of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems.

Topical Outline (include percentage of time in course spent in each subject area):

Heat Transfer / Comfort / Climate:	10%
Envelope / Passive heating & cooling:	40%
Mechanical systems:	20%
Water systems:	10%
Electrical systems:	10%
Other systems:	10%

Textbooks/Learning Resources:

Mechanical and Electrical Equipment for Buildings, 11th edition by Grondzik, Kwok, Stein and Reynolds, published by John Wiley & Sons.

- Two open-book exams, one on Lighting, one on Acoustics.
- Three final papers: Daylighting, Lighting, Acoustics.

Textbooks/Learning Resources

30 excerpts from a wide variety of sources collected for download on UB Learns.

Course Number/Title	ARC 482/582 – Professional Practice
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Credits	3
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Type of Course	Lecture/Graduate & Undergraduate
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Required/Elective	Required for Graduates/Elective for Undergraduates
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Dates Offered	Spring 2013, 2014, 2015
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Instructors:	Kenneth S. MacKay, AIA
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Pre-requisites	Permission of instructor
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Course Overview

This course will focus on the professional practice of architecture including (but not limited to): the contractual obligation of the Architect, the ethical responsibilities of the Architect, the relationship of the Architect to the building and fabrication process, the relationship of the Architect to consultants, sub-consultants and suppliers, project management, office structure, and the moral responsibilities of the Architect to society.

NAAB Performance Criteria Addressed

- B. 7 Financial Considerations: *Understanding* of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.

- C. 3 Client Role in Architecture: *Understanding* of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.

- C. 4. Project Management: *Understanding* of the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods.

- C. 5. Practice Management: *Understanding* of the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.

- C. 6. Leadership: *Understanding* of the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.

- C. 7. Legal Responsibilities: *Understanding* of the architect's responsibility to the public and the client as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.

- C. 8. Ethics and Professional Judgment: *Understanding* of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.
- C.9. Community and Social Responsibility: Understanding of the architect's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors

Topical Outline (include percentage of time in course spent in each subject area):

Financial Considerations:	10%
Client Role in Architecture:	10%
Project Management:	10%
Practice Management:	10%
Leadership:	10%
Legal Responsibilities:	20%
Ethics and Professional Judgment:	10%
Community and Social Responsibility:	10%
Other (historical context):	10%

Textbooks/Learning Resources

Reading assignments for each class can be expected to be 20 to 40 pages. Due to the wide range of material covered in this course there is no single text. Readings include chapters from books listed in the bibliography included in the syllabus, AIA documents, articles from journals, and NCARB professional development programs. Readings are placed on the course shared drive.

Completion Requirements

Ten (10) in-class Quizzes
One (1) Final Paper
Comprehensive Final Exam

Course Number/Title ARC 501 – Design Studio 1

Credits	7
Type of Course	Studio
Dates Offered	Fall 2012, 2013, 2014
Instructor	Jean LaMarche (F2012, 2014) Michael Zebrowski (F2013)
Pre-requisites	Acceptance to 3.5 grad program

Course Overview

ARC501 constitutes an accelerated introduction to Architecture and architectural thinking/making. It explores basic ideas and skills necessary for the conception, analysis and production of architecture. Through a series of studio-based and interrelated projects, the Studio addresses issues of: scale, program, site, representation, structures, construction, inhabitation, and spatial relationships.

The First 3.5-Year Studio concentrates on the practice of architectural production, at the scale of both buildings and models. It emphasize basic principles, methods, and tools of material manipulation in order to introduce students to the importance of both precision and flexibility in a diverse sequence of multi-dimensional skill building exercises and design-based projects. These skill-building and design projects are supported by an introduction to modernist and late twentieth century theories concerning the relationships of building and construction to architectural design principles, issues, and values.

Learning Objective

- Develop basic skills in making and drawing in relation to design explorations and architectural presentations.
- Develop an awareness of spatial and material relationships through design and analysis
- Understand scale and proportion in relation to the human body.
- Develop an awareness of design in both its physical and cultural contexts.
- Introduce methods of working based on a culture of exploration and experimentation.
- Develop knowledge of building construction, materials, tools, and processes and their impact on the spaces/material conditions of architecture.
- Gain knowledge and understanding of the primary issues in the development of modern architecture and its late twentieth century challenges and re-interpretations.

NAAB Performance Criteria Addressed

- A.2 Design Thinking Skills:** *Ability to* raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.
- A.3 Visual Communication Skills:** *Ability to* use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.
- A.6 Fundamental Design Skills:** *Ability to* effectively use basic architectural and environmental principles in design.
- A.8 Ordering Systems Skills:** *Understanding of* the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

Topical Outline (include percentage of time in course spent in each subject area):

Conceptual thinking and skill-building exercises (20%)

Site documentation and analysis (5%)

Basic design skills (40%)

Drawing, modeling, and representation techniques (25%)

Visual and verbal presentation skills (10%)

Textbooks/Learning Resources:

Yee, Rendow. Architectural Drawing (Wiley, 2007).

Ching, Francis. Building Construction Illustrated (John Wiley & Sons, 2008).

Tufte, Edward R. Envisioning Information (Graphics Press, 1990).

Rowe, Colin. Mathematics of the Ideal Villa and Other Essays (MIT Press, 1984).

Evans, Robin. Translations from Drawing to Building and Other Essays (AA Publications, 1997).

Course Number/Title	ARC 502 – Design Studio 2: Morphology and Context
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Credits	6
Type of Course	Studio
Required/Elective	Required
Dates Offered	Spring 2013, 2014
Instructor	Kory Smith (2013) Joyce Hwang (2014)
Pre-requisites	ARC 501 2.0 Overall GPA, 2.5 ARC GPA

Course Overview

This studio explores spatial and formal logics by considering typological precedents in the architectural design process. Students generate spatial conditions that are derived from those observed in the precedents. Emphasis is placed on understanding systems and relationships in existing buildings and using them as a springboard for developing spatial “derivatives.” Students consider the function and spatial possibilities of circulation systems (including designing for public accessibility), as well as structural and environmental systems.

The project is to design a public, institutional building that will engage students in considering relationships between public and private spaces, and contextual relationships between building design and site design, as two mutually interdependent processes.

Learning Objectives

- **Developing Conceptual frameworks:** In the pursuit of architecture as a cultural endeavor that is informed by an understanding of environmental, social, material, and spatial factors, students are encouraged to initiate a develop an critical position, and an argument for his/her project.
- **Analytical Methods:** Research and critical graphic and spatial analyses of precedents form a base for design process.
- **Design Processes and Project Development:** Modeling, drawing, diagramming, and other methods of making are emphasized as forms of spatial and material investigation.
- **Production / Representation:** Clarity, precision, and craftsmanship are emphasized.

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NAAB Performance Criteria Addressed

- A.2 Design Thinking Skills:** *Ability to* raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.
- A.3 Visual Communication Skills:** *Ability to* use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.
- A.6 Fundamental Design Skills:** *Understanding to* effectively use basic architectural and environmental principles in design.
- A.7 Use of Precedents:** *Ability to* examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.

- A.8 Ordering Systems Skills:** *Understanding* of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.
- B.2 Accessibility:** *Ability* to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities
- B.4 Site Design:** *Ability* to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.
- B.5 Life Safety:** *Ability* to apply the basic principles of life-safety systems with an emphasis on egress.

Topical Outline (include percentage of time in course spent in each subject area):

Precedent Analysis and Spatial Derivations: 20%
Site Documentation, Analysis, and Translation: 15%
Schematic Design: 25%
Design Development: 25%
Representation and Visual Communication: 15%

Textbooks/Learning Resources:

Reiser, Jesse. *Atlas of Novel Tectonics*. Princeton Architectural Press, 2006.
Moussavi, Farshid. *The Function of Form*. Actar, 2009
Clark, Roger and Pause, Michael. *Precedents in Architecture: Analytic Diagrams, Formative Ideas, and Partis*. Wiley, 2012.
Ching, Francis. *Architectural Graphics*. Wiley, 2009.
Yee, Rendow. *Architectural Drawing*. Wiley, 2011.
Architectural Graphic Standards.

Course Number/Title	ARC 503 – Architectural Design Studio 3
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Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Fall 2012, 2013, 2014
Instructors:	Brian Carter (2012, 2013, 2014) Shannon Bassett (2014)
Pre-requisites	ARC 501, ARC 502 3.0 Overall GPA, 3.0 ARC GPA

Course Overview

This semester long studio focuses on the relationship of building and site, architecture, landscape and tectonics. Students are asked to examine those relationships through a series of investigations of building, site, places, materials and systems and through conversations and writing. Studies of the integration of those aspects of design and the simultaneous consideration of specific sites and requirements will be directed to discover opportunities for design expression, improved building performance and the forging of strong links between humans and their environment. This studio investigates how building and site are interrelated and how the simultaneous consideration of both creates opportunities for design expression, improved building performance and stronger connections between humans and their environment. It will address site planning, program development, design, planning, materials, and constructional & environmental systems and reference the integrative nature of design.

Learning Objective

- To **develop** abilities to formulate site-specific architectural proposals within conceptual frameworks that work at different scales.
- To **focus** a critical awareness of the potential of integrating aesthetic, technical, social and cultural aspects of building design.
- To **investigate** the nature and quality of public and private space.
- To **instill** an appreciation of the formal, spatial and conceptual potential of materials and construction systems.
- To **build** skills in verbal, graphic and three dimensional presentation.
- To introduce opportunities presented in the **building/site interface**, and develop design strategies, familiarity with precedent and technical skills to engage those opportunities.
- To explore the **interior-exterior relationship** and nature of their architectural separation.
- To provide a number of contexts in which to explore **scale, degree of intervention, and design of the site and landscape** in relation to a building.

- To engage the ***phenomenological nature of landscape and site*** through design and consider how architects can engage a continuously transforming medium.
- To build skills in site planning and building design based upon principles of sustainability, observation/engagement of site conditions and forces, and conventions and standards for various programmatic elements and how they might relate to the built form.
- To develop critical observational skills and familiarity with both the vocabulary of architecture and landscape terms and techniques and enable the formulation of site design ideas and how they support one's larger design intent.
- To make use of building structure as not only a means of support, but also as a generator and definer of interior space and exterior form.

NAAB Performance Criteria Addressed

A. 2. Design Thinking Skills: *Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.*

A.5. Investigative Skills: *Ability to gather, assess, record, apply, and Comparatively evaluate relevant information within architectural coursework and design processes.*

A. 6. Fundamental Design Skills: *Ability to effectively use basic architectural and environmental principles in design.*

A. 7. Use of Precedents: *Ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.*

B. 1. Pre-Design: *Ability to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.*

B. 2. Accessibility: *Ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.*

B. 3. Sustainability: *Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.*

B. 4. Site Design: *Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.*

B. 5. Life Safety: *Ability to apply the basic principles of life-safety systems with an emphasis on egress.*

C. 1. Collaboration: *Ability to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.*

C. 2. Human Behavior: *Understanding* of the relationship between human Behavior, the natural environment and the design of the built environment.

Topical Outline (include percentage of time in course spent in each subject area):

Precedent Analysis (10%)
Site Analysis/Research (10%)
Building Project Development (80%)
 Predesign/Programming
 Envelope design
 Structure diagram
 Sustainability diagram
 Accessibility/Life Safety diagram

Textbooks/Learning Resources:

Allen Stan, "Notations and Diagrams: Mapping the Intangible", from Practice: Architecture, Technique and Representation, Stan Allen, Routledge, 2009, pp40-70.

Banham, Reyner, The Architecture of the Well Tempered Environment, The Architectural Press, London, 1969.

Corner, James, "The Agency of Mapping: Speculation, Critique and Invention", from Mappings, Edited by Dennis Cosgrove, Reaktion Books, 1999, pp 213-300.

DeKay, Mark and G.Z. Brown, Sun, Wind and Light: Architectural Design Strategies, Wiley, 2014.

McHarg, Ian, Design with Nature, Wiley, 1995.

Mornement, Adam, Boathouses, Frances Lincoln, 2010.

Course Number/Title	ARC 504 – Architectural Design Studio 4
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Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Spring 2013, 2014
Instructors:	Annette LeCuyer
Pre-requisites	ARC 501, ARC 502 & ARC 503 3.0 Overall GPA, 3.0 ARC GPA

Course Overview

The focus of this semester is comprehensive architectural design - the synthesis of concept and making. The studio focuses on the design of a modest scale building on an urban site.. Through this project, students engage aesthetic, technical, social and environmental aspects of design and consider matters ranging from the scale of the city to the tectonic detail.

Learning Objectives

To ***formulate*** a site-specific architectural proposal within a **conceptual framework that works at many scales**, from the city to the detail.

To ***sharpen*** a critical awareness of **the interaction between aesthetic, technical, social, cultural, political and economic values** in the shaping of architecture and urban design.

To ***explore*** the formal, spatial and conceptual potential of **materials and construction assemblies** and the **interplay of multiple ordering systems**.

To ***understand*** the **building envelope** as cultural and environmental mediator.

To ***develop*** strategies of **integrated and sustainable design**.

To ***refine*** skills of **verbal and visual presentation**.

NAAB Performance Criteria Addressed

B.6 Comprehensive Design: *Ability* to produce a comprehensive architectural project that demonstrates each student's **capacity to make design decisions across scales** while **integrating** the following Student Performance Criteria:

A.2 Design Thinking Skills: *Ability* to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A.4. Technical Documentation: *Ability* to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

A.5 Investigative Skills: *Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.*

A. 8. Ordering Systems Skills: *Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.*

A. 9. Historical Traditions and Global Culture: *Understanding of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.*

B.2 Accessibility: *Ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.*

B. 3. Sustainability: *Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.*

B.4 Site Design: *Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.*

B.5 Life Safety: *Ability to apply the basic principles of life-safety systems with an emphasis on egress.*

B. 8 Environmental Systems: *Understanding the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.*

B. 9. Structural Systems: *Understanding of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.*

Topical Outline (include percentage of time in course spent in each subject area):

Case study /precedent analysis/ site documentation	10%
Scheme design	45%
Design development/Integrated building systems	45%

Textbooks/Learning Resources:

The studio includes a series of short lectures on critical topics (see outlines).

The main resource for relevant aspects of the building code:

Allen, Edward and Iano, Joseph. *The Architect's Studio Companion* (Wiley & Sons, fourth/fifth editions).

A bibliography of materials on reserve in the library (case studies, typology studies, tectonic details) is made available to the students.

Course Number/Title	ARC 511 – Architectural Communications
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Credits	3
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Type of Course	Lab
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Required/Elective	Required
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Dates Offered	Fall 2014
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Instructors:	Stephanie Davidson (2012, 2013) Laura Garofalo (2014)
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Pre-requisites	Architecture major or permission of instructor
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Course Overview

This course will expose students to a variety of methods used in architectural representation, both 2d and 3d. Students will learn various techniques to communicate spatial conditions and concepts, including, but not limited to, hand drawing, surveying, cad and manual drafting, collage, photographic manipulation, color theory, and model making. There will be an equal emphasis on the development of both manual and digital skills. Beyond the acquisition of technical skills, this coursework will challenge students to think critically about representational techniques, and will demonstrate how representations are connected to design process. Targeted exercises will develop the students' abilities to work with color, multimedia drawing composition, develop modeling strategies, organize digital files, and explore the sketch as a medium of both documentation and communication of ideas. In addition to a solid set and a broad array of communication skills and fabrication methods, students should leave the course with a more complex way of perceiving the built environment

Learning Objective

- The ability to execute multiple drawing types (plan, section, elevation, axonometric, perspective) in multiple media as well as their exigencies and affordances
- The understanding of color theory
- The understanding of narrative through drawing
- The understanding of organizational principles including but not limited to gestalt principles
- The ability to read architectural drawings and represent architectural space
- The understanding that architectural representation is an iterative process that demands reworking to achieve its goals

In addition the following Skill sets will be taught:

- To draft and 3d model using in AutoCAD, Rhinoceros, and hand drafting
- To design and construct physical models using a combination of digital and analog media
- Digital rendering
- Post processing of digital renderings

NAAB Performance Criteria Addressed

- A3. Visual Communications Skills** - *Ability to use appropriate representational media such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process*
- A.8. Ordering Systems Skills:** Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

Topical Outline (include percentage of time in course spent in each subject area):

Drafting/drawing/other representational techniques (30%)

Analog and digital modeling (30%)

Use of color and composition (10%)

Visual literacy (10%)

Spatial organization, its representation, and communication (20%)

Textbooks/Learning Resources:

The Interaction of Color, Joseph Albers + plates from rare books section

"Translations from Drawing to Building", Robin Evans

Invisible Cities, Italo Calvino

The Phaidon Archive of Graphic Design (exerpts)

A set of short films will be used in relation to class topics.

Rhino 5 Users Guide <http://www.rhino3d.com/download/rhino/5.0/UsersGuide>

Level 1 Manual <http://files.na.mcneel.com/rhino/5.0/docs/en/Rhino%20Level%201%20v5.pdf>

Level 2 Manual <http://www.rhino3d.com/download/rhino/5.0/Rhino5Level2Training/>

Rhino Hidden Secrets <http://wiki.mcneel.com/rhino/hiddensecrets>

AutoCAD 2014 for Dummies, Bill Fane

Course Number/Title	ARC 512 – Architectural Communications
Credits	3
Type of Course	Lab
Required/Elective	Required
Dates Offered	Spring 2013, 2014
Instructors:	Dennis Maher(2013), Michael Williams(2014), Virginia Melnyk(2015)
Pre-requisites	Architecture major or permission of instructor

Course Overview

This course is the second in a sequence of two. The main objective of this course is to introduce the students to both the technical and the philosophical complexities of representation in relationship to built artifacts. Through lectures, and examples, the students are made aware of the fact that the product of the work of the architect is commonly understood to not be the building, but a representation of the building; and that the architect produces drawings, the blueprints from which the builder manufactures the building. In counterpoint to this simple understanding of the work of the architect and representation, in this class, we study drawing and construction as simultaneous and intertwined activities. We use drawing as a method of understanding, analyzing, and dissecting construction, and construction as a method of testing the limits of drawing.

On the technical side, the course is organized to teach students modeling, drawing, digital representation, and digital fabrication techniques. Students examine the relationship of each technique to architectural concepts and ideologies.

Learning Objective

- To understand the philosophical and ideological context of techniques for the construction of artifacts, and their link to the historical context of architecture.
- To study and practice architectural modeling utilizing a varied set of materials and techniques.

NAAB Performance Criteria Addressed

A.3 Visual Communication Skills: *Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.*

Topical Outline (include percentage of time in course spent in each subject area):

Visual Communication Skills: 100%

Course Number/Title	ARC 455/555 – Structures 3
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Credits	3
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Type of Course	Lecture
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Required/Elective	Required
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Dates Offered	Fall 2012, 2013, 2014
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Instructors:	Matthew Dates
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Pre-requisites	ARC 453/553 – Structures 2
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Course Overview

This is the third course in the structures sequence which will build on what has been learned in the previous (2) classes. Investigation of structural systems with an emphasis on recognizing the advantages of each system is the focus of the class. A back to the basics approach will be used to make the formulas in Structures I and II applicable to real world design. The focus will be on understanding the physical nature of the structural systems, not the analysis of individual components. We will begin with a brief review of the basics, then move into bending systems, trusses, compression systems, tension systems, foundation systems, and lateral systems. A course project will be the main focus employing weekly assignments to formulate of a structural portfolio worthy of an Architect.

Learning Objective

To develop an understanding of structural systems and their integration in the architectural design.

NAAB Performance Criteria Addressed

- A.4. Technical Documentation:** *Ability* to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.
- B. 9. Structural Systems:** *Understanding* of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.
- B. 12. Building Materials and Assemblies:** *Understanding* of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

Topical Outline (include percentage of time in course spent in each subject area):

Loads, Tension, Compression: 7%
Bending: 15%
Arches, Tension Structures, Catenaries: 8%
Lateral Systems, Diaphragms: 7%
Stability and Tall buildings: 8%
Foundation Systems: 15%
Structural Systems Project: 40%

Textbooks/Learning Resources:

Optional texts introduced throughout the semester, none are required.

Course Number/Title	ARC 611 – Computer Modeling
Credits	4
Type of Course	Lecture & Lab
Required/Elective	Required
Dates Offered	Fall 2012 through Fall 2014
Instructors:	Michael Rogers (2012), Nick Bruscia (2013), Virginia Melnyk (2014)
Pre-requisites	None

Course Overview

This course is intended to introduce students to various computational design applications, through both a lecture and a lab component. The lecture portion will provide students with a historical, conceptual, and technical body of information that will supplement the digital tools learned in the lab and offer a context within which the digital tools introduced can be understood.

Content within both the lectures and lab sessions will include topics such as image processing, vector drawing, 3D modeling, Parametric Modeling, Building Information Modeling (BIM) and rendering techniques. Lab sessions are held weekly with the intention to provide students with hands-on instruction to assist in developing a comfortable skill level with the following software packages: Rhinoceros 4, AutoCAD 2010, MentalRay renderer (3DS Max Design 2010), Grasshopper V 0.8xx, Revit Architecture 2010, as well as the most current Adobe Suite.

Learning Objective

- Introduce students to the basic theoretical concepts of computer graphics.
- Introduce students to skills for producing architectural representations through several forms of digital media.
- Introduce students to various computer applications as they pertain to design, fabrication, and professional practice.

NAAB Performance Criteria Addressed

- A. 3. Visual Communication Skills:** *Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.*
- A. 8. Ordering Systems Skills:** *Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.*

Topical Outline (include percentage of time in course spent in each subject area):

Drawing and other representational techniques (60%)
Presentation skills (40%)

Textbooks/Learning Resources:

Textbooks: None

Online resources:

www.arc411611.blogspot.com (course website from 2010)

www.kindsofways.info (current course website - 2011)

Others may include:

www.digitaltoolbox.info

<http://designreform.net/>

<http://www.designalyze.com/>

Course Number/Title ARC 606-4 – EP Research Studio: Entangling the Grid: Hybrid Domestic Ecologies

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Fall 2012
Instructors:	Laura Garofalo
Pre-requisites:	Architecture major

Course Overview

The Ecological Practices Graduate Research Group Studio's semester project will develop a master plan for a housing prototype that breaks down the boundaries between domestic space and services, the natural and synthetic. The semester's research and design work will develop alternative domestic geographies derived from the intertwined relationship of natural processes and man-made constructs. We will focus on architecture's role in urban transformation, to redefine the city as a living performative landscape. Students will engage the ecological, urban and architectural scales through analysis, material models, and visual narratives.

Learning Objectives:

- To develop an understanding of architecture's role as productive component of its biome.
- To develop an understanding of ecologically conscientious material, formal, structural, and spatial organization of large residential sites.
- To develop an understanding of architecture in relation to climate, ecology, energy and living systems.
- To enable exploration of landscape architecture, and site design in relation to architectural production.
- To develop parallel design strategies at site and building scales.
- To explore the relation between riparian corridors, bodies of water, and urban/suburban ecologies.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.6 Fundamental Design Skills: Ability to effectively use basic architectural and environmental principles in design.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

B. 3 Sustainability: Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the

environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.

B. 4 Site Design: Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

- Design Thinking Skills: 30%
- Investigative Skills: 20%
- Fundamental Design Skills: 10%
- Site Design: 20%
- Sustainability: 20%

Textbooks/Learning Resources:

Banham, Reiner, "A Home is not a House", *Art in America* Number Two. April, 1965.

Heschong, Lisa. *Thermal Delight in Architecture*, MIT Press, 1979.

McHarg, Ian. *Design with Nature*. Doubleday, 1971.

Mostafavi, Mohsen. *Ecological Urbanism*. Lars Muller, 2010.

Kwok, A. and , Grondzik, W., *The Green Studio Handbook*, 2011.

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Fall 2014
Instructors:	Laura Garofalo
Pre-requisites:	Architecture major

Course Overview

The Ecological Practices Graduate Research Group Studio's semester project will develop tectonic systems and performative surfaces that embed green infrastructure into architecture. We will address architecture's role in urban transformation by focusing on the ubiquitous building typologies of the big box store. Using these standard commercial structures as a foundation, the semester's research and design work will develop alternative envelope systems and site infrastructure. Proposals will redefine the grey site of the big box store as a living performative landscape. These architectures will aim to break down the distinction between building services and the landscape, the "natural" and the "synthetic". These reimagined generic structures will be derived from the intertwined relationship of natural processes and man-made constructs to become green infrastructure. Students will engage the ecological, urban and architectural scales through analysis, material studies, generative geometries, performative prototypes, and visual narratives.

Learning Objectives:

- To develop an understanding of architecture's role as productive component of its biome through passive and active engagement with the environment.
- To develop an understanding of ecologically conscientious material, formal, structural, and spatial organization of large commercial sites.
- To develop an understanding of architecture in relation to climate, ecology, energy and living systems.
- To develop an understanding of architecture and climate.
- To develop morphological transformation and tectonics of active architectural surfaces that addresses the contemporary role of performativity, expression and tectonics of ornament in architecture. To enable rain-screen application (particularly focusing on ceramic systems) to conventional big box construction.
- To develop and understanding of green wall and green roof assemblies,
- To enable exploration of landscape architecture, site design, bio-swales, rain gardens, grading, and drainage in relation to architectural production.
- To develop parallel design strategies at site and building scales.
- To explore the relation between riparian corridors and urban/suburban ecologies.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.6 Fundamental Design Skills: Ability to effectively use basic architectural and environmental principles in design.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

B. 4 Site Design: Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

B. 12 Building Envelope Systems and Assemblies: Understanding of the basic principles involved in the appropriate selection and application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Design Thinking Skills: 20%
Investigative Skills: 20%
Architectural Design Skills: 10%
Site Design: 25%
Envelope: 25%

Textbooks/Learning Resources:

Additional required class readings will be supplied as PDF's.

- Design for Northern Climates: Vlademir Matus
- Living Systems: Lait Margolis
- Ornament: Antoine Picon
- Biophilic Design: Stephen Kellert
- From Eco-Cities to Living Machines: Nancy & Jack Todd
- Nature, Landscape, and Building for Sustainability: William Sanders
- Thermally active Surfaces in Architecture: Kile Moe
- Planting Green Roofs and Living Walls: Nigel Dunnett
- Green Roof Systems: A Guide to the Planning, Design and Construction of Building Over Structure: S. Weiler/K. Scholz-Barth
- Green Infrastructure for Landscape Planning: Integrating Human and Natural Systems: Gary Austin
- The Infrastructural City: Networked Ecologies in Los Angeles: Kazys Varnelis

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Fall 2013
Instructors:	Joyce Hwang
Pre-requisites:	Architecture major

Course Overview

We are familiar with the notion of the city as an urban organism, comprised of networks of interdependent living species and systems. Urban habitats – and the deleterious effects of habitat loss – are significant conditions to contend with, in considering strategies for approaching urbanism today. But what happens in extreme scenarios, when a particular species assumes an intensified presence in the city? Given the conflicting logics of ‘extreme’ animal habitat scenarios (nuisance, health hazard, pest – vs – biodiversity, natural pollinator and predator), we must ask ourselves fundamental questions in reconciling ‘nature’ and ‘culture,’ not as two separate spheres but as a complex and dynamic milieu. This studio will ask and address these questions throughout the semester, as we explore zoological approaches in proposing architectural and urban strategies.

Learning Objectives:

- **Conceptual frameworks:** You will be encouraged to initiate a ‘hypotheses’ and develop an argument for your project.
- **Research Methods:** You will be encouraged to engage productive research methods through various means. Research includes processes of observing, documenting, analyzing, searching, reading, testing, synthesizing, making, drawing, building, and speculating.
- **Design Process and Project Development:** Mapping and diagramming will be emphasized as forms of synthesizing research. Modeling, drawing, and making will be emphasized as forms of spatial and material investigation.
- **Production / Representation:** The artifacts you produce are critical not only to the development of your project, but also are highly significant in conveying your ideas. Clarity, precision, and craftsmanship will be emphasized.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.6 Fundamental Design Skills: Ability to effectively use basic architectural and environmental principles in design.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

B. 3 Sustainability: Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.

B. 4 Site Design: Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Design Thinking Skills: 30%

Investigative Skills: 25%

Fundamental Design Skills: 15%

Site Design: 15%

Sustainability: 15%

Textbooks/Learning Resources:

Hadas Steiner, Grey Room, 13: "For the Birds."

Jakob von Uexkull, A Foray into the Worlds of Animals and Humans.

Giorgio Agamben, The Open: "Umwelt" and "Tick"

Course Number/Title	ARC 606-4 – EP Research Studio: The Urban Wilderness
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Credits	7
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Type of Course	Studio
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Required/Elective	Required
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Dates Offered	Spring 2013
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Instructors:	Joyce Hwang
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Pre-requisites:	Architecture major
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Course Overview

This studio will investigate various issues by considering buildings, urban structures, and infrastructure as opportunities for design and appropriation, to enable co-species habitation. We will focus on projects at multiple scales – from proposing ‘interventions’ to developing a more comprehensive ecological system of ‘urban wilderness.’

Learning Objectives:

- Developing an understanding of programmatic, social, technological, and spatial organization mechanisms that express our contemporary understanding of the environment. Conceptual framework: You will be encouraged to initiate a ‘hypotheses’ and develop an argument for your project.
- Research Methods: You will be encouraged to engage productive research methods through various means. Research includes processes of observing, documenting, analyzing, searching, reading, testing, synthesizing, making, drawing, building, and speculating.
- Interdisciplinary Collaboration: This studio is being conducted in a collaborative effort with Katharina Dittmar, Ph.D, Associate Professor of Biological Sciences. You will be encouraged to incorporate questions, knowledge, and research methods from the field of biology into your project development process.
- Design Process and Project Development: Mapping and diagramming will be emphasized as forms of synthesizing research. Modeling, drawing, and making will be emphasized as forms of spatial and material investigation.
- Representation: The artifacts you produce are critical not only to the development of your project, but also are highly significant in conveying your ideas. Clarity, precision, and craftsmanship will be emphasized.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.6 Fundamental Design Skills: Ability to effectively use basic architectural and environmental principles in design.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

B. 3 Sustainability: Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.

B. 4 Site Design: Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Design Thinking Skills: 30%

Investigative Skills: 25%

Fundamental Design Skills: 15%

Site Design: 15%

Sustainability: 15%

Textbooks/Learning Resources:

McHarg, Ian. *Design with Nature*. Doubleday, 1971.

Mostafavi, Mohsen. *Ecological Urbanism*. Lars Muller, 2010.

Mason White, Lola Sheppard, Neeraj Bhatia, Maya Przybylski. *Pamphlet Architecture 30: Coupling: Strategies for Infrastructural Opportunism*. Princeton Architectural Press, 2011.

The Dirt: <http://dirt.asla.org/>

The Metropolitan Field Guide: <http://www.metrofieldguide.com/>

Animal Architecture: <http://www.animalarchitecture.org/>

Perec, Georges. *Species of Space and other pieces*. Penguin Books, 2008.

Buffalo Zoning:

http://www.ci.buffalo.ny.us/Home/City_Departments/Office_of_Strategic_Planning/RegulatoryBoards/ZoningBoardAppeals/CityZoningOrdinancesandDistricts

City of Buffalo Charter: <http://ecode360.com/BU1237#BU1237> (See Chapter 511: Zoning)

GIS Maps: http://www.ci.buffalo.ny.us/Home/GIS_Maps_Section

Buffalo Green Code: <http://www.buffalogreencode.com/>

Abrams, Janet and Hall, Peter, eds. *Else/Where: Mapping New Cartographies of Networks and Territories*. University of Minnesota Design Institute, 2006.

Corner, James. "The Agency of Mapping: Speculation, Critique and Invention" in *Mappings*. Reaktion Books, 1999.

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Spring 2014
Instructors:	Sean Burkholder
Pre-requisites:	Graduate Architecture major

Course Overview

Exploring the dynamic edge conditions of the Great Lakes Region, this studio will undertake the proposition of a new “park” on Buffalo’s Outer Harbor. This new park must be novel yet well seated in the historical precedent set forth by Olmsted. It’s responsibilities will be manifold to both the city and the regional environment. The park is intended to exist at the crux of social, ecological and economic concerns, as many proposals for such places negate or undermine the ecological aspects of this trinity. The new Outer Harbor Park will become the true green heart of Buffalo, as it strategically knits ecology, history and a strong optimistic vision of life in the city together into one landscape.

Learning Objectives:

This course is designed to promote the following skills:

- Develop an understanding of the role of design and ecological engineering as it relates to regional concerns such as climate change, resilience, disaster mitigation, habitat creation/conservation and public access
- Foster the skills of data management and distillation thought the incorporation of large amounts of contextual information and media.
- Promote long-term regional agendas as design motivators
- Develop a strong understanding of the historical buffalo waterfront and the role Olmsted has played in the identity of Buffalo
- Elevate ecological planning and design as forerunners in the design process
- Encourage productive group work
- Develop modes of communication that heighten ecological awareness
- Critically examine the relationship between building and landscape in a way that stresses performance as equal to formal concerns

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

B. 4 Site Design: Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Performance/Product/Presentation	
R+D History/Olmsted	15%
R+D Ecology	5%
R+D Representation Workshop	10%
R+D Development	15%
Outer Harbor Park Principles	15%
Outer Harbor Park Final Project	40%

Textbooks/Learning Resources:

Course Number/Title ARC 605-1: ID Research Studio: PATTERNS OF WORK | PATTERNS OF PERCEPTION

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Fall 2013
Instructors:	Ken Mackay
Pre-requisites:	Graduate Architecture major

Course Overview

This Graduate Studio is intended to focus students' design inquiry on the development and refinement of the ability to generate architectural designs based on a deeper and more qualitative understanding of architectural space. The specific spatial qualifiers that we will address in the studio are the topics of site, office working environments, structural systems, and the interaction of various building systems in relation to human experience and comfort. Each of these topics will be examined to explore interrelationships of the various systems which comprise a building and their impacts on the occupants' experience.

The contemporary building includes a vast array of systems: structural, heating, ventilating, plumbing, electrical, fire protection, envelope and enclosure. Each system brings its own discipline and therefore its own ordering systems and priorities. The act of bringing together parts of buildings in a coherent, orderly composition or not is a fundamental question in contemporary architecture. The choices about which orderly or disorderly manner the various systems of a building are brought together are important for students to consider in their design projects. In your previous studios you have explored the process by which to make design decisions. In this studio we will expand the number of systems and variables which are to be included in the design. In addition, we will explore how various performance metrics, such as Ecotect and Radiance, may be used to facilitate the architects design decision making process while sorting through the often contradictory requirements of various systems. These systems will be studied in relation to human experience and in-depth research in perception will be used to strengthen design decisions.

Learning Objectives:

This studio is considered a comprehensive studio. Based on this, the pedagogy of this studio will focus on the following instructional objectives set forth in the "2009 NAAB Conditions for Accreditation" for comprehensive design. These instructional objectives fall into two main categories; 'Realm A: Critical Thinking and Representation' and 'Realm B: Integrated Building Practices, Technical Skills and Knowledge'. The first two projects of the semester, Precedent Analysis and Site Analysis & Model specifically address Realm A. Students will also develop a strong understanding of the 8 areas of inclusive design, which are: Body Fit, Comfort, Awareness, Understanding, Wellness, Social Integration, Personalization, and Cultural Appropriateness.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A.4. Technical Documentation: *Ability* to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.6 Fundamental Design Skills: Ability to effectively use basic architectural and environmental principles in design.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

B.2 Accessibility: *Ability* to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities

B.3 Sustainability: *Ability* to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.

B.4 Site Design: *Ability* to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

B.5 Life Safety: *Ability* to apply the basic principles of life-safety systems with an emphasis on egress.

B.8 Environmental Systems: *Understanding* the principles of environmental systems" design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.

B.9 Structural Systems: *Understanding* of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Investigative Skills: 25%

Research Skills: 30%

Fundamental Design Skills: 30%

Critical Thinking Skills: 15%

Textbooks/Learning Resources:

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Fall 2012
Instructors:	Korydon Smith
Pre-requisites:	Architecture major

Course Overview

One billion people, a sixth of the world's population, live in informal "squatter" settlements. By 2030, the number will double. Public health, education, food security, employment, and housing are major concerns in these cities, which exist throughout the world—Khayelitsham, Cape Town, South Africa; Orangi, Karachi, Pakistan; Sultanbeyli, Istanbul, Turkey; and Heliópolis, São Paulo, Brazil. Despite the rapid growth of informal settlements, architects and designers have played only minor roles in the development, design, and improvement of these environments. This studio, therefore, explores the phenomena of informal settlements— political, cultural, economic, spatial, tectonic, and aesthetic—and the stereotypes and realities that surround and exist within them. How and why do informal settlements arise? What are the similarities and differences among settlements throughout the world; what is universal and what is particular? What role can and should architectural design play?

Learning Objectives:

Goal 1: Research

- a. To gain a broad understanding of the histories, social orders, economics, politics, geographies, tectonics, and aesthetics of a specific informal settlement.
- b. To gain an understanding of the specific similarities and differences (histories, social orders, economics, politics, geographies, tectonics, and aesthetics) among various settlements.
- c. To effectively utilize a variety of sources—books, journals, dissertations, films and media, blogs and internet sources, and people—to gather information regarding (a) and (b) above.
- d. To effectively communicate verbally and graphically the findings of (a) and (b) above.
- e. To contribute to the group's collective establishment of the particular criteria, contents, and format of the research (atlas).

Goal 2: Design

- a. To identify, based on the research, a viable opportunity for a place specific intervention.
- b. To develop, through iterative design studies,¹ a competent design proposal for (a), based on the criteria set forth in the studio.
- c. To identify, based on the research, a viable opportunity for a "universal" design.
- d. To develop, through iterative design studies, a competent design proposal for (c), based on the criteria set forth in the studio.

Goal 3: Personal Development

- a. To participate in group discussions and critiques with objectivity, optimism, and insight.
- b. To gain stronger abilities in critiquing one's own work.

- c. To work with tenacity and perseverance in improving one's work— intellectually, graphically, and in craft—working consistently each day.
- d. To take a leadership role in facilitating at least one workshop.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.6 Fundamental Design Skills: Ability to effectively use basic architectural and environmental principles in design.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Design Thinking Skills: 30%

Investigative Skills: 25%

Fundamental Design Skills: 15%

Site Design: 15%

Sustainability: 15%

Textbooks/Learning Resources:

Freire, Paulo. "Challenges of Urban Education," in *Pedagogy of the City* (New York: Continuum, 1993), 52-60.

Palleroni, Sergio. "Building Sustainable Communities and Building Citizens," in Bryan Bell and Katie Wakeford, eds., *Expanding Architecture: Design as Activism* (New York: Metropolis Books, 2008), 274-279.

Polak, Paul. "Design for the Other Ninety Percent," in *Design for the Other 90%* (New York: Smithsonian Institution, 2007), 18-25.

Freire, Paulo. *Pedagogy of the Oppressed* (New York: Continuum, 1974).

Davis, Howard. "Building as a Unified Social Process: Traditional Villages and Informal Settlements," in *The Culture of Building* (Oxford: Oxford University Press, 2006), 27-42.

Neuwirth, Robert. "The Cities of Tomorrow," in *Shadow Cities* (New York: Routledge, 2006), 309-315.

Agrest, Diana. "Transcultural Urbanities and the Production of the Informal City," in Alfredo Brillembourg-Tamayo, Kristin Feireiss, and Hubert

Klumpner, eds., *Informal City: Caracas Case* (Munich: Prestel, 2005), 234-237.

Simone, Abdou Maliq. "Introduction: Remaking African Cities," in *For the City Yet to Come* (Durham: Duke University Press, 2004), 1-20.

Films:

Bus 174, Arts Alliance Amer, 2004.

City of God, Miramax Films, 2002.

Favela Rising, HBO Documentary Films, 2010.

Forced to Flee, IRIN Films, 2008.

Slumdog Millionaire, Celador Films, 2008.

Slum Futures, Bullfrog Films, 2004.
Slum Survivors, IRIN Films, 2007.

Other Useful Resources:

UN-Habitat, www.unhabitat.org
The World Bank, www.worldbank.org
Human Rights Watch, www.hrw.org
World Health Organization, www.who.int
Shelter Centre, <http://sheltercentre.org/>
UN-Habitat. *The Challenge of Slums: Global Report on Human Settlements, 2003* (London: Earthscan, 2003).
UN-Habitat. *State of the World's Cities 2010/2011: Bridging the Urban Divide* (London: Earthscan, 2008).
Abrams, Charles. *Man's Struggle for Shelter in an Urbanizing World* (Cambridge: MIT Press, 1964).
Roy, Ananya, and Nezar Alsayyad. *Urban Informality: Transnational Perspectives from the Middle East, Latin America, and South Asia* (Lanham: Lexington Books, 2004).
Turner, John. *Housing by People: Towards Autonomy in Building Environments* (New York: Pantheon Books, 1977).
Turner, John, and Robert Fichter, eds. *Freedom to Build: Dweller Control of the Housing Process* (New York: Macmillan, 1972).

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Spring 14
Instructors:	Korydon Smith
Pre-requisites:	Architecture major

Course Overview

Detached, single-family residences are one of the most prevalent dwelling types throughout the world. In many countries, residences are self-designed and self-built. In the United States, by contrast, speculative housing is far more common. Speculative (“spec”) housing is designed and constructed in advance of a client/owner, where a developer/home builder anticipates—speculates—what spaces, features, and materials will be most desirable to a potential buyer, while balancing other factors, such as construction costs. In this system, home buyers have far more interaction with realtors and financiers than with architects. This does not mean, however, that architects are uninvolved.

In any case, the spec housing model presents a number of design challenges and ethical issues. This is especially the case in “affordable housing,” where prospective owners (or renters) have fewer choices and also less voice regarding what is built. This studio, therefore, explores alternative methodologies of giving voice to future home owners and expanding the possibilities of spec housing. The studio will lead to proposals for new housing prototypes for a neighborhood in central Buffalo. The studio will utilize inclusive design theories and principles while gaining input from “citizen experts” (local professionals in planning and architecture, non-profit housing developers, builders, and local community groups). In particular, we will be partnering with a local community development agency: FLARE (Fillmore Leroy Area Residents, Inc.).

Learning Objectives:

Goal 1: Research

- a. To gain a broad understanding of the histories, social orders, economics, politics, geographies, tectonics, and aesthetics of a specific informal settlement.
- b. To gain an understanding of the specific similarities and differences (histories, social orders, economics, politics, geographies, tectonics, and aesthetics) among various settlements.
- c. To effectively utilize a variety of sources—books, journals, dissertations, films and media, blogs and internet sources, and people—to gather information regarding (a) and (b) above.
- d. To effectively communicate verbally and graphically the findings of (a) and (b) above.
- e. To contribute to the group's collective establishment of the particular criteria, contents, and format of the research (atlas).

Goal 2: Design

- a. To identify, based on the research, a viable opportunity for a place specific intervention.
- b. To develop, through iterative design studies, a competent design proposal for (a), based on the criteria set forth in the studio.
- c. To identify, based on the research, a viable opportunity for a “universal” design.
- d. To develop, through iterative design studies, a competent design proposal for (c), based on the criteria set forth in the studio.

Goal 3: Personal Development

- a. To participate in group discussions and critiques with objectivity, optimism, and insight.
- b. To gain stronger abilities in critiquing one's own work.
- c. To work with tenacity and perseverance in improving one's work— intellectually, graphically, and in craft—working consistently each day.
- d. To take a leadership role in facilitating at least one workshop.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.6 Fundamental Design Skills: Ability to effectively use basic architectural and environmental principles in design.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Design Thinking Skills: 30%

Investigative Skills: 25%

Fundamental Design Skills: 15%

Site Design: 15%

Sustainability: 15%

Textbooks/Learning Resources:

FLARE: <http://flarecenter.org/welcome.html>

Districts of Buffalo: www.ci.buffalo.ny.us/Home/Leadership/CommonCouncil

Buffalo Urban Design Project: urbandesignproject.org

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Fall 2014
Instructors:	Ed Steinfeld
Pre-requisites:	Graduate Architecture major

Course Overview

The studio will focus on inclusive design of two projects on the Buffalo Niagara Medical Campus in Buffalo, NY. The projects will be conducted with involvement of BNMC staff. A short introductory project called the Food Hub will be used to clarify the value of inclusive design. This project will focus on re-use of a small existing building and the site surrounding it, including its relationship to the neighboring buildings. The major project of this studio will be the design of a new building for the Innovation Center at the Buffalo Niagara Medical Campus in Buffalo, NY. The Innovation Center is a research and development space housing life sciences and biotech companies, as well as companies offering support services like IP attorneys, talent acquisition, sales, and marketing. The growing space is designed to accommodate small to medium companies seeking office, wet lab and/or research space, on a month-to-month basis or via longer term leases. The Innovation Center is currently home to 30 start-up businesses. The current facility is completely full and plans are in the works to design and construct an additional building on the BNMC campus and a new parking garage. The project will explore design for innovation in business enterprises using the framework of inclusive design. The major question to be explored in the studio is: "How can inclusive design ideas facilitate the development of a workplace that is supportive for creative work in the 21st century?"

Learning Objectives:

Over the course of the semester, students will:

1. Practice applying principles of inclusive design for a diverse end user population.
2. Practice generating ideas quickly and communicating them visually and orally
3. Learn how to conduct a case study of a building type from the perspective of inclusive design.
4. Learn how to synthesize research knowledge into creative design strategies.
5. Learn how to balance inclusive design goals with other important architectural goals.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.7 Use of Precedents - Ability to provide a coherent rationale for the programmatic and formal precedents employed in the conceptualization and development of architecture and urban design projects

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

B.2 Accessibility - Ability to design both site and building to accommodate individuals with varying physical abilities

B.4 Site Conditions - Ability to respond to natural and built site characteristics in the development of a program and design of a project

B.6 Comprehensive Design - Ability to produce an architecture project informed by a comprehensive program, from schematic design through the detailed development of programmatic spaces, structural and environmental systems, life-safety provisions, wall sections, and building assemblies, as may be appropriate; and to assess the completed project with respect to the program's design criteria

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

C.2 Human Behavior - Human Diversity, Awareness of the diversity of needs, values, behavioral norms, and social and spatial patterns that characterize different cultures, and the implications of this diversity for the societal roles and responsibilities of architects

C.9 Community and Social Responsibility - Environmental Conservation - Understanding of the basic principles of ecology and architects' responsibilities with respect to environmental and resource conservation in architecture and urban design

Topical Outline (include percentage of time in course spent in each subject area):

Investigative Skills: 25%

Research Skills: 30%

Fundamental Design Skills: 30%

Critical Thinking Skills: 15%

Textbooks/Learning Resources:

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Spring 2013
Instructors:	Ed Steinfeld
Pre-requisites:	Graduate Architecture major

Course Overview

The studio will focus on inclusive design of a children's museum for Canalside in Buffalo, NY, a harbor front development next to Buffalo's downtown. Children's museums have a diverse mission, including an introduction to history, culture, technology and the arts. In addition, they have to provide a unique experience to compete with the many other competing interests for a child and family's time. The work of the studio will be coordinated with a local group that operates a min-children's museum, Explore n' More. They have been chosen to develop and operate a children's museum at Canalside, tentatively called Buffalo n'More. Initial studies have been completed and a development plan is underway. Architects and creative consultants are working with Explore n'More to complete the plan. The new museum is expected to open in 2016. The studio will benefit from the participation of both the Explore n'More and Canalside development staff and consultants.

Learning Objectives:

Over the course of the semester, students will:

1. Practice applying principles of inclusive design for a diverse end user population.
2. Practice generating ideas quickly and communicating them visually and orally
3. Learn how to conduct a case study of a building type from the perspective of inclusive design.
4. Learn how to synthesize research knowledge into creative design strategies.
5. Learn how to balance inclusive design goals with other important architectural goals.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.6 Fundamental Design Skills: Ability to effectively use basic architectural and environmental principles in design.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Investigative Skills: 25%

Research Skills: 30%

Fundamental Design Skills: 30%

Critical Thinking Skills: 15%

Textbooks/Learning Resources:

Course Number/Title ARC 606-2 – Material Culture Research Studio: KNOT, Researches in Architectural Textiles

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Fall 2013
Instructors:	Shayne O'neil
Pre-requisites:	Architecture major

Course Overview:

The studio is comprised of a sequence of design exercises beginning with knotting or crocheting. Each poses an experimental approach to knotting as both object and technique. Taken together, the semester will focus upon (1) spatial investigations of the knot and its tectonic relationship to a greater field or weave (2) the tectonic integration of this weave first as textile and further elaborations beyond textile to other materials (3) their aggregation into a larger organization prototype (4) tests, modification and further elaborations resulting in the construction of a material assembly at full scale.

The sequence emphasizes tectonic integration, construction and unit aggregation. The knotted components will incrementally be joined or woven. This will require multiple translations from the original knot/weave into increasingly complex organizations and materialities (perhaps no longer 'textile' in its original meaning but now tectonically preserved as pure organization).

Investigations comprising this sequence will be flexible enough to adjust to an evolving understanding of knotting. They should not linger constrained by their origins in an earlier phase. Each stage should seek added constraints or tests identifying new behaviors- strengths, forces, deformations etc., which further lead to other avenues of research. Conclusions drawn from this sequence will inevitably invite the introduction of more architecturally familiar materials surveyed not for their immediate 'textility' per se but for similar behaviors and capacities.

Learning Objectives:

This studio is focused upon the tectonic, aesthetic and conceptual possibilities of heterogeneous architectural constructs. There are three primary objectives of the course:

1. to realize a full-scale (1:1) construction project while carefully considering aspects of materiality, scale, craft and detailing.
2. to utilize techniques prototyping and iterative design.
3. To determine design internet based on material behaviors.

NAAB Performance Criteria Addressed:

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Research on textiles (20%)

Prototyping exploartions (20%)

Course Number/Title ARC 606-2 – Material Culture Research Studio:

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Fall 2014
Instructors:	Dennis Maher
Pre-requisites:	Architecture major

Course Overview:

This studio draws upon the persistent theme of “the aedicule” (literally, *little building*) in architecture. Students utilize collage/assemblage techniques in order to design and construct three mobile, mutable, micro-architectural structures within the former Immaculate Conception Church in Buffalo. Each of the new aedicules will fulfill one of the following types/programs:

1. TOWER – a vertically organized classroom space
2. CABINET – an expandable gallery/art storage unit
3. INCUBATOR – a place for private, solitary contemplation

Learning Objectives:

This studio is focused upon the tectonic, aesthetic and conceptual possibilities of heterogeneous architectural constructs. There are three primary objectives of the course:

1. to realize a full-scale (1:1) construction project while carefully considering aspects of materiality, scale, craft and detailing.
2. to explore the theme of “the aedicule” (literally, *little building*) as a design framework and research anchor. Precedents that are particularly related to the project site (a former church) will be given special consideration, including, for example, paintings of gothic churches, ecclesiastical furniture, altarpieces, and retables.
3. to utilize techniques of collage/assemblage as generative design tools.

NAAB Performance Criteria Addressed:

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Research on the theme of the aedicule in architecture (20%)

Research on historic precedents in ecclesiastical architecture (20%)

Project development (60%)

Textbooks/Learning Resources (Selection):

John Summerson, Heavenly Mansions: An Interpretation of the Gothic

Robert Harbison, Thirteen Ways

University at Buffalo, Materials and Methods Shop

Selected ecclesiastical furniture, altarpieces, choirs, and retables

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Fall 2012
Instructors:	Georg Rafailidis
Pre-requisites:	Graduate Architecture major

Course Overview

Projects are typically triggered by a client's brief, a program and a business plan. The life span of these triggers however is increasingly short in comparison to the lifespan of architecture. In this studio we will dissolve the relationship between the lifespan of buildings and the lifespan of uses. We will investigate the material culture of an architecture with an extremely long lifespan. Fleeting programs are not able to determine this architecture. Instead, the focus shifts to the material and constructive reality of such architecture and spaces that offer an instinctive, physical relationship to architecture independent from specific uses. Students will be involved in intensive individual material studies throughout the course, parallel with readings, discussions and analyses.

Learning Objectives:

- Developing an understanding of the embedded complexities of everyday material systems and building practices.
- Develop strategies towards an immediate, physical relationship to architecture.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Research on historic and contemporary construction strategies in architecture	25%
Research on specific but program-independent typologies	25%
Project development	50%

Textbooks/Learning Resources:

Allen, Edward (ed), *The Responsive House*, The MIT Press, Cambridge MA, 1972
Allen, Edward, *Some Problems in the creation of adaptive dwellings*; in IL 14, *Adaptable Architecture*, Stuttgart, 1975; p. 244-245

Boudon, Philippe. *Lived-In Architecture, Le Corbusier's Pessac Revisited*, The MIT Press, Cambridge, Massachusetts, 1972.

Brand, Stewart. *How Buildings Learn*. New York: Penguin Books, 1994.

Deplazes, Andrea; *Constructing Architecture*; Birkhäuser Architecture, 2008

Hollis, Edward. *The Secret Live of Buildings*. New York, New York: Metropolitan Books, 2009.

Lacaton, Anne; Vassal, Jean-Philippe. *Buy One, Get One Free*. In: *Re-Inventing Construction*, Berlin: Ruby Press, 2010.

Schlaich, Maik; El Zareef, Mohamed. *Infra-Lightweight Concrete*. In: *Beton- und Stahlbetonbau* 04/08.

IL 14, *Adaptable Architecture*, Stuttgart, 1975

Isozaki, Arata; *Japan-ness in Architecture*; The MIT Press, 2006

Mostafavi, Mohsen; Leatherbarrow, David. *On Weathering, The Life of Buildings in Time*. Cambridge Massachusetts and London England: The MIT Press, 1993.

Rossi, Aldo. *The Architecture of the City*. Cambridge Massachusetts and London England: The MIT Press, 1982.

Van Reeth, Bob. "Cultural Durability" in *Time-based Architecture*, Bernard Leupen, Rene Heijne and Jasper van Zwol

Course Number/Title	ARC 606-2 – Material Culture Research Studio: Architecture Co-Robotics and Craft
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Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Spring2014
Instructors:	Mike Silver
Pre-requisites:	Architecture major

Course Overview:

This studio will explore the implications of emerging technologies on the art of masonry construction by considering recent developments in the field of robotic fabrication. Moving beyond the work of Gramazio and Kohler and their research on brick stacking robot arms we will attempt to re-imagine architecture by exploring leg-based, situationally aware systems. This move out of the factory and into the real world will depend on a new understanding of how intelligent machines can function alongside humans to perform challenging tasks on messy and uneven terrain. We will focus specifically on how these new tools can transform the art of building by exploring new formal, spatial, tectonic and environmental configurations for a new brick and glass books shop in Paolo Alto, California. Independent design projects will be pursued along with group work focused on the creation of mock walls and a functional, leg-based masonry robot.

Learning Objectives:

This studio is focused upon the tectonic, aesthetic and conceptual possibilities of heterogeneous architectural constructs. There are three primary objectives of the course:

1. to realize a full-scale (1:1) construction project while carefully considering aspects of materiality, scale, craft and detailing.
2. to explore the theme of “the aedicule” (literally, *little building*) as a design framework and research anchor. Precedents that are particularly related to the project site (a former church) will be given special consideration, including, for example, paintings of gothic churches, ecclesiastical furniture, altarpieces, and retables.
3. to utilize techniques of collage/assemblage as generative design tools.

NAAB Performance Criteria Addressed:

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.11. Applied Research: *Understanding the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.*

C. 1. Collaboration: *Ability to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.*

Topical Outline (include percentage of time in course spent in each subject area):

Research (20%)

Collaboration between architects and engineering students (20%)

Project development (60%)

Textbooks/Learning Resources (Selection):

1. David Rotman, "How technology is destroying Jobs" MIT Technology Review,
<http://www.technologyreview.com/featuredstory/515926/how-technology-is-destroying-jobs/>
2. Robert D. Atkinson, "Stop Saying Robots are Destroying Jobs-The Aren't"
<http://www.technologyreview.com/view/519016/stop-saying-robots-are-destroying-jobs-they-arent/>
3. Aviva Hope "Rutkin, Reports Suggest Nearly Half of U.S. Jobs Are Vulnerable to Computerization" MIT Technology Review,
<http://www.technologyreview.com/view/519241/report-suggests-nearly-half-of-us-jobs-are-vulnerable-to-computerization/>
1. Reg Miller from "Masonry Training: Past, Present and Future"
http://www.masonryconstruction.com/Images/Masonry%20Training_%20Past,%20Present%20and%20Future_tcm68-1375067.pdf
2. Bill Gates, "A Robot in Every Home", Scientific American, January 2007, Pp. 58-65.
3. Pike Loop by Gramazio and Kohler, De Zeen Magazine,
<http://www.dezeen.com/2009/09/16/pike-loop-by-gramazio-kohler/>
4. Flight Assembled Architecture, 2011-2012, FRAC Center Orleans, France,
<http://www.gramaziokohler.com/web/e/projekte/209.html>
5. Mike Silver, "Discrete Space: Automason Ver. 1.0", Smart Architecture ACADIA, Conference Proceedings, 2005, Pp 68-76.
6. Mike Silver, "Off-Road Fabrication: Architecture, Leg-Based Robotics and Machine Vision", Fabricate 2014 Conference Proceedings, ETH, Zurich, Switzerland. 2014.
7. See a walking prototype at: <http://www.youtube.com/watch?v=C2KV7euy8uU>
and <http://www.youtube.com/watch?v=LPedOJjZAYY>

Course Number/Title
RESEARCH

ARC 606-2 – Material Culture Research Studio: MATERIALS

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Spring 2013
Instructors:	Jean Lamarche
Pre-requisites:	Architecture major

Course Overview:

In general, “the term material culture refers both [a)] to the psychological role, the meaning, that all physical objects in the environment have to people in a particular culture and [b)] to the range of manufactured objects (techno-complex) that are typical within a socioculture and form an essential part of cultural identity. Human beings perceive and understand the material things around them as they have learned to from their culture. Manufactured items are especially meaningful and the relationship between object and meaning is usually what scholars of material culture study. Material culture [is] learned behaviour.

Material Culture consists of studying materials and products and their human consequences. This Material Culture Graduate Studio explores the possibilities of reinventing materials, processes or construction techniques. Reinventions typically are discovered in the close examination of the material or product itself and expanding its capabilities in terms of improving or diminishing certain characteristics, such as examining a material's reaction to temperature, light, wind, and other forces, including the process of making the material ready for architectural application and the process of construction itself.

This studio will explore terra cotta in an attempt to reinvent its architectural uses. The studio will consist of workshops at Boston Valley Terra Cotta. The workshops will involve training in casting/molding and mold building, extrusion, and slipcasting, each of which will be tested in a small project. The final project will consist of teams of students designing, making, and building full scale constructions out of terra cotta.

Learning Objectives:

This studio is focused upon the tectonic, aesthetic and conceptual possibilities of heterogeneous architectural constructs. There are three primary objectives of the course:

1. to realize a full-scale (1:1) construction project while carefully considering aspects of materiality, scale, craft and detailing.
2. to explore ways to conducting research in collaboration with material manufacturer
3. to utilize techniques of prototyping as a basis for design investigation.

NAAB Performance Criteria Addressed:

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Research (20%)

Collaboration between architects and manufacturer (20%)

Project development (60%)

Textbooks/Learning Resources (Selection):

1. David Rotman, "How technology is destroying Jobs" MIT Technology Review, <http://www.technologyreview.com/featuredstory/515926/how-technology-is-destroying-jobs/>
2. Robert D. Atkinson, "Stop Saying Robots are Destroying Jobs-The Aren't" <http://www.technologyreview.com/view/519016/stop-saying-robots-are-destroying-jobs-they-arent/>
3. Aviva Hope "Rutkin, Reports Suggest Nearly Half of U.S. Jobs Are Vulnerable to Computerization" MIT Technology Review, <http://www.technologyreview.com/view/519241/report-suggests-nearly-half-of-us-jobs-are-vulnerable-to-computerization/>
1. Reg Miller from "Masonry Training: Past, Present and Future" http://www.masonryconstruction.com/Images/Masonry%20Training_%20Past,%20Present%20and%20Future_tcm68-1375067.pdf
2. Bill Gates, "A Robot in Every Home", Scientific American, January 2007, Pp. 58-65.
3. Pike Loop by Gramazio and Kohler, De Zeen Magazine, <http://www.dezeen.com/2009/09/16/pike-loop-by-gramazio-kohler/>
4. Flight Assembled Architecture, 2011-2012, FRAC Center Orleans, France, <http://www.gramaziokohler.com/web/e/projekte/209.html>
5. Mike Silver, "Discrete Space: Automason Ver. 1.0", Smart Architecture ACADIA, Conference Proceedings, 2005, Pp 68-76.
6. Mike Silver, "Off-Road Fabrication: Architecture, Leg-Based Robotics and Machine Vision", Fabricate 2014 Conference Proceedings, ETH, Zurich, Switzerland. 2014.
7. See a walking prototype at: <http://www.youtube.com/watch?v=C2KV7euy8uU> and <http://www.youtube.com/watch?v=LPedOjZAYY>

Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Fall 2014
Instructors:	Nick Bruscia
Pre-requisites:	Architecture major

Course Overview

The studio, *Fidelity vs. Tolerance*, looks to develop responsive architectural prototypes using computational modeling and simulation in concert with material testing and prototyping. Central to the research will be a series of discussions and workshops relating the relationship between the accuracy of on-screen simulations and the performance of the prototype under material constraints, which is to say, the clarity of the intention vs. the reality of its worldly behavior. The terms, *fidelity* and *tolerance* are intended to provoke an evaluation of the computational processes by which the prototypes are to be designed and fabricated, in addition to their potential applicability and context. Each term has a dual purpose, and can be each referred to as a metric (a gauge by which something is measured) as well as a social condition (an acceptance without expectation). For example, a responsive system with low fidelity and high tolerance may be one that is reaching social ubiquity, but also one that is without the need for extremely minute detailing, suggesting an architectural application at a larger scale. To begin, the studio will examine the geometric relationships responsible for the tendencies of *auxetic* materials. These materials display a unique reaction to loading as they expand and widen when stretched, opposite to the thinning of elastic materials like rubber or metal. Their physical characteristics can be applied and reimagined at a wide range of scales, and their behavior reinterpreted through more conventional materials. In addition, auxetic geometries could potentially allow for smooth and continuous topological changes from one shape to another, amounting to more elegant and subtle responses than those of purely mechanical structures. This will provide a platform for exercises in digital simulation and testing early in the semester, feeding into a catalog of basic material characteristics (physical, chemical) that will be applied to individual or group research projects. The studio will be experimental, with objectives ranging between skill building in digital crafting (both on and off-screen) to the development of a critical position on the consequences of responsive assemblies.

Learning Objectives:

- To develop an understanding of geometry as a generator of architectural design.
- To develop an understanding of formal systems that are responsive to environmental perturbations.
- To develop an understanding of parametric design and its potential for designing and testing architectural design.
- To develop an ability to design using parametric software like Rhino/grasshopper.
- To develop an ability to use rapid prototyping as a means to investigate design.
- To develop an ability to work with materials and topology to develop architectural models.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Textbooks/Learning Resources:

Partial Bibliography (specific readings will be announced and provided throughout the semester)

Addington, Michelle, Schodek, Daniel. *Smart Materials and Technologies*

Alexander, Christopher. *Notes on the Synthesis of Form*

Armstrong, Rachel, Ferracina, Simone. *Unconventional Computing. Design Methods for an Adaptive Architecture*

Ashby, W. Ross. *Design for a Brain. The Origin of Adaptive Behaviour*

Beesley, Philip et al. Proceedings of the 33rd Conference for ACADIA 2013 *Adaptive Architecture*

Beesley, Philip, Khan, Omar. *Responsive Architecture / Performing Instruments* (Situating Technologies Pamphlets 4)

Bhatia, Neeraj, Sheppard, Lola. *Bracket -- Goes Soft* (Almanac 2)

De Kestelier, Xavier, Peters, Brady. *Computation Works: The Building of Algorithmic Thought* (AD March/April 2013)

Husserl, Edmund. *Origin of Geometry*

Kapraff, Jay. *Connections. The Geometric Bridge Between Art and Science*

Kepes, Gyorgy. *Module, Proportion, Symmetry, Rhythm*

Khan, Omar et al. *Reflexive Architecture Machines* (Lulu)

Klooster, Thorsten. *Smart Surfaces and their Application in Architecture and Design*

Legendre, George. *Mathematics of Space* (AD July/August 2011)

Lorenzo-Eiroa, Pablo, Sprecher, Aaron. Eds. *Architecture In Formation*

Lynn, Greg. *Folds, Bodies & Blobs: Collected Essays*

Menges, Achim. *Material Computation: Higher Integration in Morphogenetic Design* (AD March/April 2012)

Menges, Achim, Ahlquist, Sean. *Computational Design Thinking*

Menges, Achim, Hensel, Michael. *Morpho-Ecologies*

Menges, Achim, Hensel, Michael, Hight, Christopher. *Space Reader. Heterogeneous Space in Architecture*

Negroponte, Nicholas. *The Architecture Machine*

Ng, Rashida, Patel, Sneha. *Performative Materials in Architecture and Design*

Oxman, Rivka, Oxman, Robert. *Theories of the Digital in Architecture*

Picon, Antoine. *Digital Culture in Architecture*

Pottmann, Helmut et al. *Architectural Geometry*

Spiller, Neil. Armstrong, Rachel. *Protocell Architecture* (AD March/April 2011)

Thompson, D'Arcy Wentworth. *On Growth and Form*, v.1 and v.2
Weinstock, Michael. *Emergent Technologies and Design*

Course Number/Title	ARC 605 – Situated Technologies Research Studio: Felt
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Credits	7
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Type of Course	Studio
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Required/Elective	Required
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Dates Offered	Fall 2012
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Instructors:	Jordan Geiger
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Pre-requisites:	Architecture major
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Course Overview

Computational processes for the design, fabrication, assembly and inhabitation of architecture lose all agency in the rhetorics of parametricism. Such rhetorics further mythologize the old promises of technical optimization, and also capitulate to long-disproven Capitalist tropes of labor and material economics. Sustainability is not to be found here. Further, now is not the time to accept the firm, its specializations and pecking orders as a model for creative or economic practice. And a graduate research studio can do better than promote the firm's hierarchies of responsibility and payscales. To paraphrase Friedrich Nietzsche, we're at risk of creating a practice that we could survive but wouldn't be worth living in. Instead, let's look to felt. Today, architecture emerges most sustainably as a felt thing.

Felt is a material. It is also an order, a structure, a process and a provocation to rethink design and making themselves. Of course, felt is also sensed. Felt, in a word, is not the firm; it's the soft. In this studio environment, let's experiment with felt in all these senses. Let's make soft cloth architectures, with pliant and supple structures, with their literal software, and with our own processes of exchange. Let's work at micro scales and at macro scales. Let's work with physical computing and with digital design processes, and with our hands. Let's intertwine our processes. To do so, we also intertwine our processes with others'... including that of a vibrant and evolving local entity, [Eastman Machine Company](#). Eastman is a family business in downtown Buffalo that has for over a hundred years made tools for large scale fabric cutting. They now produce some of the world's largest and most sophisticated CNC cutters. We will be guest makers at Eastman: learning from their machines' processes, exploring new-felt ones, testing material results, building full-scale soft architectures that can sense, and thinking of practical models of shared creation.

Learning Objectives:

The studio aims to instill in graduate students new abilities and understandings that are applicable to an emerging field of architectural practice, one that draws on multiple disciplines for research, diverse technical and intellectual skills, and that identifies latent potentials for new work through rigorous analysis and prototyping of solutions.

Specifically, the studio introduces “design thinking skills:” an ability to interpret cultural and economic trends toward recognizing new architectural questions in need of solutions; to develop solutions by weighing diverse points of view and evaluating multiple iterations of work; and to test alternative outcomes against relevant criteria and standards.

The studio also instills “investigative skills,” including the abilities to gather, assess, record, apply, and comparatively evaluate relevant information within architectural design processes.

Additionally, the studio introduces an “applied research,” an understanding of how results can be tested and evaluated through real results for their programmatic, formal and other systemic behaviors.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

The following outline of weeks identifies areas of focus and productivity across the semester.

- Procedural (All Weeks)
- Soft (September 4-11)
- Material (September 11-18)
- Drawn (Processing) (September 18-25)
- Post-Capitalist City Design Competition (Ongoing until October 1)
- Modeled (Rhino/Modo) (September 25 - October 16)
- Sensed (Arduino) (November)
- Cut and Assembled (Eastman) (October 18 - December 6)

Textbooks/Learning Resources:

Key Readings

- Deleuze/Guattari: Smooth and Striated
- Sanford Kwinter: Singular and Complex
- Amitai Etzioni: On post-Capitalist labor and Communitarianism
- Patrick Schumacher: Parametricist Manifesto

Cases

- ONL, Muscle Trans-Port
- Joseph Beuys, 7000 Oaks
- Issey Miyake, Steam-Stretch
- Bernard Maybeck, Sack House
- Adolf Loos, Fur Bedroom
- Birdair, Radome
- Nicholas Bruscia, Allotropic Systems
- Ant Farm, 50'x50' Pillow

Course Number/Title	ARC 606/608 – Situated Technologies Research Studio: XS
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Credits	7
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Type of Course	Studio
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Required/Elective	Required
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Dates Offered	Fall 2013
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Instructors:	Jordan Geiger
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Pre-requisites:	Architecture major
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Course Overview

The fall studio in Situated Technologies asks what new architectural issues arise around **excess**. How do spaces and times of excess appear and transform today? How do they come about with both sensory and economic surplus - in spaces of pleasure, of leisure, and more? What roles can responsiveness, including responsive technologies play - in reclaiming leftover, or excess, architectures past; but also in creating new experiences that might be deemed excessive? How do we design with and for excess architecture in all its ambivalent qualities?

Surprisingly, “excess architecture” can also be **XS** - extra small - in scale. Tiny interventions based on **responsiveness** - local, real-time and embodied interactions - can be the basis of essential transformations of existing sites, derelict architectures past, and even of disused infrastructure. No longer serving the old functions (and economies) that have long since left them, XS architecture can look to **maximal results sparked by minimal material changes**. The studio’s architectural design and research will consider “excessive” found sites and programs that can be newly ideated with responsiveness. We will dwell on the ideation and fabrication of a responsive thing - small, and in its larger context.

Learning Objectives:

The studio aims to instill in graduate students new abilities and understandings that are applicable to an emerging field of architectural practice, one that draws on multiple disciplines for research, diverse technical and intellectual skills, and that identifies latent potentials for new work through rigorous analysis and prototyping of solutions.

Specifically, the studio introduces “design thinking skills:” an ability to interpret cultural and economic trends toward recognizing new architectural questions in need of solutions; to develop solutions by weighing diverse points of view and evaluating multiple iterations of work; and to test alternative outcomes against relevant criteria and standards.

The studio also instills “investigative skills,” including the abilities to gather, assess, record, apply, and comparatively evaluate relevant information within architectural design processes.

Additionally, the studio introduces an “applied research,” an understanding of how results can be tested and evaluated through real results for their programmatic, formal and other systemic behaviors.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

This will be a beginning and introductory studio for situated technologies that will work iteratively, on personal responsive interactions. Our focus is on introducing basic ideas, concepts, techniques and working methods appropriate to Situated Technologies. Our focus is on making, in all respects of craft and with no assumption of any technical background at all: how something is made, how it is diagrammed and represented, and how it is described through code with a sense of craft and attention to detail. The studio will introduce the notion of design iteration, and that with Situated Technologies, embodied and spatial relations are studied through functioning, full-scale prototypes.

The studio will roughly be structured as follows:

- four weeks development culminating in a review
- four weeks to iterate, test, refine and document the project in response to the review.
- first half the studio is focused on making a responsive thing; the second half is focused on observing, documenting and analyzing how it performs in and adapts to different sites.
- We will take what has typically passed as a final review and make it the mid-term review.

Textbooks/Learning Resources:

Marshall McLuhan, Quentin Fiore, The Medium is the Message
Beesley et al, ed.s, Responsive Architectures, Subtle Technologies
Omar Khan and Philip Beesley, Responsive Architecture / Performing Instruments
Georges Bataille, The Accursed Share
David Harvey, Rebel Cities
Andy Warhol, THE Philosophy of Andy Warhol
Dunne & Raby, Hertzian Tales
Brian Lonsway, Making Leisure Work
Nicolas Negroponte, Soft Architecture Machines
Khan, Scholz, Shepard, ed.s, Situated Technologies Pamphlet Series
Mark Shepard, ed., Toward the Sentient City
Malcolm McCullough, Digital Ground
James Corner, The Agency of Mapping
Paul Virilio, The Overexposed City, in The Lost Dimension
Alison Sant, Redefining the Basemap
Lev Manovich, The Language of New Media
Michael Batty, Thinking about Cities as Spatial Events
Adam Greenfield, Everyware
Manuel DeLanda, A New Philosophy of Society
Philip Tabor, Striking Home
William J. Mitchell, City of Bits
William J. Mitchell, Me++
Rem Koolhaas, Mutations
Bill Moggridge, Designing Interactions
M. Christine Boyer, Cybercities
Michel de Certeau, The Practice of Everyday Life
Sanford Kwinter, Architectures of Time

Oliver Grau, Media Art Histories
Philipp Oswalt, Shrinking Cities, Volume 2
Mike Davis, Fortress L.A., in City of Quartz
William Gibson, Neuromancer
Michael Sorkin, Local Code
Bernard Tschumi, The Manhattan Transcripts
Paul Virilio, The Vision Machine
Nicholas Negroponte, Being Digital
Peter Lunenfeld, Snap To Grid
Dan Saffer, Designing for Interaction
S. Doheny-Farina, The Wired Neighborhood
William J. Mitchell, Placing Words: Symbols, Space and the City

Course Number/Title	ARC 606 – Situated Technologies Research Studio: Minor Urbanism
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Credits	7
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Type of Course	Studio
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Required/Elective	Required
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Dates Offered	Spring 2013
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Instructors:	Mark Shepard
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Pre-requisites:	Architecture major
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Course Overview

As with minor literature, minor urbanism involves speaking in a major language from a minor position. Contrary to major architecture and urban planning strategies that dominated 20th century urban development, minor urbanism emphasizes local, networked and distributed interventions that shape our collective experience of the city and constitute its varied cultural topography. Minor urbanism proposes alternatives to dominant urban ideologies that – while small in scale and local in extent – have an aggregate impact on larger urban systems. Often entangled with (and enabled by) contemporary media, communications and information technologies, minor urbanism engages techno-social practices common to everyday life in the modern city. Yet rather than reifying existing power relations embedded in technologies designed for the frictionless consumption of goods and services or the effortless control and management of urban space, practicing minor urbanism involves re-configuring, re-circuiting and re-directing these normative systems and infrastructures in ways that open them up to alternate social and political dynamics.

This transdisciplinary design research studio will take the City of Buffalo as both site and context for a series of experiments in minor urbanism. These experiments will be organized around the production of two projects. The first will be a screen-based media object – incorporating word, image, video, sound – that presents an intervention within a social media platform (Foursquare, Twitter) using an existing dataset. The second will be a physical installation at the scale of the room that incorporates space, light, sound, embedded and projected images, material structures and physical actuators, drawing from datasets generated by studio members. Outcomes from the studio's research will be featured at MediaCity 4: MediaCities, an international conference, exhibition and set of workshops to be held in Buffalo from May 3-5, 2013

Learning Objectives:

The studio aims to instill in graduate students new abilities and understandings that are applicable to an emerging field of architectural practice, one that draws on multiple disciplines for research, diverse technical and intellectual skills, and that identifies latent potentials for new work through rigorous analysis and prototyping of solutions.

Specifically, the studio introduces “design thinking skills:” an ability to interpret cultural and economic trends toward recognizing new architectural questions in need of solutions; to develop solutions by weighing diverse points of view and evaluating multiple iterations of work; and to test alternative outcomes against relevant criteria and standards.

The studio also instills “investigative skills,” including the abilities to gather, assess, record, apply, and comparatively evaluate relevant information within architectural design processes.

Additionally, the studio introduces an “applied research,” an understanding of how results can be tested and evaluated through real results for their programmatic, formal and other systemic behaviors.

NAAB Performance Criteria Addressed

A. 2 Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, research well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A. 5 Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

1/22 – 1/29 project 0: marks and indices

1/29 – 3/7 project 1: media socialities

3/10 – 3/16 spring break

3/19 – 4/25 project 2: data spatiality

4/25 final review

Textbooks/Learning Resources:

Bratton, Benjamin and Natalie Jeremijenko. Suspicious Images, Latent Interfaces, in Situated Technologies Pamphlets Series, v3. (The Architectural League of New York, 2008).

Deleuze, Gilles and Felix Guattari. Kafka: Toward a Minor Literature (University of Minnesota, 1986).

Fuller, Matthew. Media Ecologies: Materialist Energies in Art and Technoculture (MIT Press, 2005).

Kitchen, Rob and Martin Dodge. Code/space: Software and everyday life (MIT Press, 2011).

Nissenbaum, Helen and Kazys Varnelis. Modulated Cities: Networked Spaces, Reconstituted Subjects, in Situated Technologies Pamphlets Series, v9. (The Architectural League of New York, 2012).

Banzi, Massimo. Getting Started with Arduino (O'Reilly, 2008)

Margolis, Michael. Arduino Cookbook, 2nd Edition (O'Reilly, 2011)

Noble, Joshua. Programming Interactivity, 2nd Edition (O'Reilly, 2012)

Reas, Casey and Ben Fry. Processing: A Programming Handbook for Visual Designers and Artists (MIT Press, 2007).

Steele, Julie and Noah Iliinsky. Beautiful Visualization: Looking at Data through the Eyes of Experts (O'Reilly, 2010).

R. Klanten, S. Ehmann, T. Tissot, N. Bourquin. Data Flow 2: Visualizing Information in Graphic Design (Gestalten, 2010).

Course Number/Title	ARC 606 – Situated Technologies Research Studio: Networked Ecologies
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Credits	7
Type of Course	Studio
Required/Elective	Required
Dates Offered	Spring 2014
Instructors:	Mark Shepard
Pre-requisites:	Architecture major

Course Overview

Our lives are increasingly entangled with a variety of networks at a variety of scales. But despite the kittens, we can still attempt to untangle them in an effort to better understand them. Mapping networked ecologies is by no means new. Yet when doing so, unexpected associations often emerge, and new avenues for intervening within them present themselves. This studio will provide a critical context for experimental practice engaging contemporary networked ecologies. Two tactics will serve as a foil¹ for our operative milieu: the ruse and the exploit. The ruse is an action intended to mislead, deceive, or trick². Recent reporting in mainstream media surrounding the dataveillance activities of the NSA³, exposing a publicly funded security apparatus distributed across public and private sectors that commands a budget measured in billions of dollars⁴, suggests that the ruse is currently as pervasive as it is capitalized. The ruse also manifests itself within contemporary media art practices that draw on cultures of hacking and appropriation, where the performance within physical “public” space of a critical action gains agency through its proliferation throughout networked media and information systems. Designed to provoke and sustain public debate, these performances bring to life complex issues at play within contemporary urban public space. ⁵

How might we deploy the ruse strategically in support of positive change within networked ecologies?

The exploit, on the other hand, involves taking advantage of something—a person, situation, a network— unethically or unjustly for one's own ends, or alternately for making a better use of that something⁶, to direct it toward collective ends, ends for which it wasn't originally intended.⁷ The exploit today reveals itself first as transgression, then as explication. The exploitation of resources—be they natural, human, material, financial, or political—is as pronounced as it is widespread. The exploitation of proprietary information such as Edward Snowden's disclosures of NSA techniques and practices, for instance, gains agency in proportion to its media coverage and distribution.

How might exploits that produce positive change in collective terms be formulated?

Adopting a transdisciplinary approach to understanding complex relations between human, natural and artificial systems, we will investigate contemporary assemblages of networked ecologies and study how they can be influenced, shaped and mediated by a variety of techniques and technologies. ⁸ The studio will be structured as an open framework for critique and discussion of ongoing student research and experimentation combined with focused tutorials on tools, techniques and methods involved in programming networked ecologies.

Learning Objectives:

The studio aims to instill in graduate students new abilities and understandings that are applicable to an emerging field of architectural practice, one that draws on multiple disciplines for

research, diverse technical and intellectual skills, and that identifies latent potentials for new work through rigorous analysis and prototyping of solutions.

Specifically, the studio introduces “design thinking skills:” an ability to interpret cultural and economic trends toward recognizing new architectural questions in need of solutions; to develop solutions by weighing diverse points of view and evaluating multiple iterations of work; and to test alternative outcomes against relevant criteria and standards.

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NAAB Performance Criteria Addressed

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A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.

C. 1. Collaboration: *Ability* to work in collaboration with others and in multidisciplinary teams to successfully complete design projects.

Topical Outline (include percentage of time in course spent in each subject area):

Analysis 3 weeks

Projection 8 weeks

Documentation 3 weeks

Textbooks/Learning Resources:

Bratton, Benjamin and Natalie Jeremijenko. Suspicious Images, Latent Interfaces, in Situated Technologies Pamphlets Series, v3. (The Architectural League of New York, 2008).

Deleuze, Gilles and Felix Guattari. Kafka: Toward a Minor Literature (University of Minnesota, 1986).

Fuller, Matthew. Media Ecologies: Materialist Energies in Art and Technoculture (MIT Press, 2005).

Kitchen, Rob and Martin Dodge. Code/space: Software and everyday life (MIT Press, 2011).

Nissenbaum, Helen and Kazys Varnelis. Modulated Cities: Networked Spaces, Reconstituted Subjects, in Situated Technologies Pamphlets Series, v9. (The Architectural League of New York, 2012).

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R. Klanten, S. Ehmann, T. Tissot, N. Bourquin. Data Flow 2: Visualizing Information in Graphic Design (Gestalten, 2010).

4.5. Faculty Resumes | Faculty/Courses Matrix

Faculty Member (alphabetical order)	Summary of expertise, research, or experience (limit 25 words)	ARC 101	ARC 102	ARC 111	ARC 112	ARC 201	ARC 211	ARC 231/ 531	ARC 311	ARC 234/ 534	ARC 301	ARC 302	ARC 352/ 552	ARC 362/ 562	ARC 403	ARC 404	ARC 411	ARC 412	ARC 442/ 542	ARC 453/ 553	ARC 473/ 573	ARC 455/ 555	ARC 475/ 575	ARC 501	ARC 502	ARC 503	ARC 504	ARC 511	ARC 512	ARC 573	ARC 482/ 582	ARC 605/ 607	ARC 606/ 608	ARC 609	ARC 611		
Hata, Hiroaki	Research and creative work focuses on the design, history, theory and criticism of urban structures and community development.																																				
Hume, Matthew	Research focuses on blurring the boundaries between design and construction processes and latent materials behaviors play a more critical role in building systems and our perceptions of space.																																				X
Hwang, Joyce	Current research and practice focus on developing strategies for integrating wildlife habitation into building systems.	X	X	X	X						X																										
Khan, Omar	Current research explores the role of crowds and social media's collectives in the design of responsive architecture.																																		X		
Lamarche, Jean	Scholarship focuses on design and post-Renaissance history, theory, and criticism in art and architecture, including contemporary theories grounded in deconstructivist and psychoanalytic criticism.																																				
LeCuyer, Annette	Research and teaching focus on the integration of design + construction in contemporary architecture.															X		X																	X		
O'Neil, Shayne	His research spans investigations of materials, methods of fabrication, the history and theory of modernism and the spatial nexus of landscape and architectural disciplines.																		X															X			
Ozay, Erkin	Research focuses on urban asset distribution practices and their spatial impacts on the city, with a specific concentration on the design of educational environments.																																				
Mackay, Kenneth	The focus of both built and scholarly work is natural and artificial light, building systems integration and the role that each of these play in generating form and space.											X			X*																						
Maher, Dennis	Explores critical approaches to demolition, renovation, and restoration.					X	X		X																								X				
Rafailidis, Georg	Research explores alternative architecture that is independent of program and builds relationships with users in physical, instinctive and unmediated ways.		X																																X		

Faculty Member (alphabetical order)	Summary of expertise, research, or experience (limit 25 words)	ARC 101	ARC 102	ARC 111	ARC 112	ARC 121	ARC 201	ARC 202	ARC 211	ARC 231/	ARC 311	ARC 312	ARC 334	ARC 241/	ARC 301	ARC 302	ARC 352/	ARC 362/	ARC 403	ARC 404	ARC 411	ARC 412	ARC 442/	ARC 453/	ARC 473/	ARC 455/	ARC 475/	ARC 501	ARC 502	ARC 503	ARC 504	ARC 511	ARC 512	ARC 573	ARC 582	ARC 605/	ARC 606/	ARC 608	ARC 609	ARC 611	
Tashjian, Karen	licensed architect						X																																		
Vito, Stephanie	local practitioner														X																										
Warren, Harry	licensed architect																		X																						

*Performance Programming

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

[illegible]

Name	Irene E. Ayad
Courses Taught	ARC 212 Introduction to Architecture ARC 435/535 History of American Architecture and Urbanism
Education	Ph.D., History of Architecture and Urbanism, Cornell, 1995 MA, Urban Planning, University at Buffalo, 1987 BA, Art History, Empire State College, New York, 1982
Teaching Experience	University at Buffalo, Adjunct Assistant Professor, 2006 - Present Buffalo State University, Adjunct Assistant Professor, 2007-Present New Jersey Institute of Technology, Visiting Assistant Professor, 1997-2001
Publications	Book review, <i>Louis Kahn's Situated Modernism</i> , <i>Arris</i> , vol. 17, 2006 "Louis Kahn and Space Frames," in <i>Beyond the Cube: The Architecture of Space Frames and Polyhedra</i> , ed. J. François Gabriel, 1997 (The book received an Honorable Mention by the AIA)
Academic Awards	Recipient of the Provost Challenge Grant for Using Technology in the Class Room, New Jersey Institute of Technology, 2001 McDougall Award for Academic Achievements, Cornell, 1990-91
Grants	\$ 2,000 educational grant for an architectural crossword puzzle competition
Memberships	Society of Architectural Historians American Association for Regional Planning Preservation Buffalo Niagara

Name	Shannon Bassett
Courses Taught	ARC 503- Architectural Design Studio 3
Education	Masters of Architecture in Urban Design, Harvard Graduate School of Design, 2005 B.Arch with Distinction, Carleton University School of Architecture, 1998
Teaching Experience	<i>University at Buffalo:</i> Assistant Professor. Department of Architecture, 2014 – present <i>University of South Florida</i> , School of Architecture and Community Design and School for Global Sustainability. Tampa, FL: Assistant Professor, 2007 – 2014 <i>Wentworth Institute of Technology</i> , College of Architecture, Design and Construction Management, Department of Architecture. Boston, MA: Adjunct Professor, 2006 – 2007 and 2000-2003, Visiting Professor, 2002 (Spring) <i>Harvard Graduate School of Design</i> , Department of Urban Planning and Design. Cambridge, MA: Teaching Assistant, Strategic Urban Development and Planning (Dr. Mona Serageldin), 2004
Professional Experience	Shannon Bassett Urban Landscapes Studio, Tampa, FL-Buffalo, NY. 2012- current S+H Construction, Cambridge, MA. 2006-2007 Institute for International Urban Development, Cambridge, MA. 2005 Harvard Graduate School of Design, Centre for Urban Development Studies (CUDS), Cambridge, MA. 2004-2005 John Moriarty and Associates, Boston, MA. 2002-2003 Moshe Safdie and Associates, Somerville, MA. 1999-2002 Jane Thompson Architect. Ottawa, ON, Canada. 1998 National Capital Commission. Ottawa, ON, Canada. 1997 and 1992 Brady, Stanley, O'Connell Architects, Dublin, Ireland. 1994 Carleton University Design Clinic, Ottawa, ON, Canada. 1992
Registration	Completing Registration in the State of Massachusetts
Publications	Book Publications: "(Re)stitch Tampa Riverfront-Designing the Post-War Coastal American City through Ecologies", Actar, New York NY and Barcelona, forthcoming Projects published in books: "Speculative Surfaces for Chinese Eco-City: Designing an Alternative Form of Development Through Landscape and Ecology as Urbanism", Hong Kong and Shenzhen Bi-City Biennale of Urbanism and Architecture featured in the ensuing book publication, "Learning from Tri-ciprocal Cities: The time, the place, the people." ORO Editions, (2014) Exhibitions: "Speculative Surfaces for the Chinese Eco-City", Hong Kong and Shenzhen Bi-City Biennale of Urbanism and Architecture (2012) Articles Authored (Selected): "Designing the Village Tapestry-New Architectural Agency(ies) of Community Building and Design", Globalizing Architecture/Flows and Disruptions, ACSA National, Miami, FL, peer reviewed; Projects Published in Journals: "Designing an Alternative Form of Development for the Tianjin Eco-City", Urban Flux, Beijing, Fall 2011.
Academic and Professional Honors	Outstanding Faculty Research Achievement from the USF Office of Research and Innovation, 2012 Tampa City Commendation for (re)stitch Tampa, 2012 Pullara Award, AIA Tampa Bay, 2011 National Endowment for the Arts Grant, Access to Artistic Excellence, 2011
Memberships	ACSA, IACP (International Association for China Planning) Elected Board Member, ISOCARP (International Society of City and Regional Planners)

Name	Paul L. Battaglia
Courses Taught	ARC 475/575 Environmental Controls 2, Acoustics and Lighting ARC 404 Aural Architecture
Education	M. Arch, Massachusetts Institute of Technology, 1975 B.S. Art and Design, Massachusetts Institute of Technology, 1973
Teaching Experience	<i>University at Buffalo:</i> Adjunct Professor, Department of Architecture, 1985-present Architectural Studio Instructor, Millard Fillmore College, 1986-1988 <i>Villa Maria College:</i> Instructor, Interior Design, 2005-2011
Professional Experience	President, STC Architectural Products LLC, Buffalo, NY: 2012-present Senior Architect, Stieglitz Snyder Architecture, Buffalo, NY: 2009-2012 Principal Associate, Clark Patterson Lee, Buffalo, NY: 2007-2009 Senior Architect, Kideney Architects, Buffalo, NY: 2006-2007 Principal Architect, Hamilton Houston Lownie, Buffalo, NY: 1979-2006 Assistant Planner, Buffalo Urban Renewal Agency: 1978-1979 Architectural Designer, Cannon Design, Buffalo, NY: 1976-1978
Registration	Architect, New York State, 1980 to present
Publications	"Acoustical Comfort in Restaurants," Acoustical Society of America, October 2014
Academic and Professional Honors	Second Prize, New Single Family Housing for the Cold Springs Neighborhood, Bethel Community Development Corporation, 2002. First Award, Downtown Buffalo Strategic Plan, American Planning Association Western New York Chapter, 2000 First Award – Preservation, Market Arcade, American Institute of Architects Buffalo/Western New York Chapter, 1996 Award for Beautification, St. Paul's Cathedral Handicapped Access, Buffalo Area Chamber of Commerce, 1984
Memberships	AIA, ASA

Name	Martha Bohm
Courses Taught	<p>Studios:</p> <p><i>ARC 607-1, Solar Decathlon DD/CD Studio</i></p> <p><i>ARC 608, SD³: Solar Decathlon Schematic Design Sustainable Decisionmaking</i></p> <p><i>ARC 301, Junior Design Studio "Gated Community"</i></p> <p><i>ARC 302, Junior Design Studio "Time Based Architectures_ LifeCycles"</i></p> <p><i>ARC 301, Junior Design Studio "Composite Systems"</i></p> <p><i>Costa Rica Study Abroad Program Architectural Studio</i></p> <p>Lecture/Seminars:</p> <p><i>ARC 598, Solar Decathlon: Collaboration and Integration</i></p> <p><i>ARC 404: NetZERO Buffalo</i></p> <p><i>ARC 592: Tools for the Invisible: Energy Simulation in Design</i></p> <p><i>ARC 473/573, Environmental Controls 1: Thermal Environmental Systems</i></p> <p><i>Costa Rica Study Abroad Program Sustainable Design Seminar</i></p>
Education	<p><i>University of Oregon, Department of Architecture – Master of Architecture</i></p> <p><i>Harvard University, Department of Earth and Planetary Sciences – A.B.</i></p>
Teaching Experience	<p><i>University at Buffalo:</i> Visiting Assistant Professor Fall 2010-Spring 2010</p> <p>Assistant Professor Fall 2010 – present</p> <p><i>University at Virginia:</i> Invited juror for multiple midterm and final reviews (2008-2010)</p> <p>Invited lecture "Design of the Invisible" (2009)</p>
Professional Experience	Sustainable Design Coordinator at William McDonough + Partners (2008-2010)
Registration	
Publications	<p><i>Beyond Patronage: Reconsidering Models of Practice</i>, co-edited book with J.Hwang and G. Printz, and chapter "Architect as Detective" within. <i>Under contract, to be published fall 2014.</i></p> <p>"Sliding Scales: A Case Study in Metrics Selection" in <i>Proceedings of the Architectural Research Centers Consortium: "Considering Research"</i>, Spring 2011</p> <p>"An Integrated Design Approach for Sustainable Communities" in <i>Proceedings of the 42nd Hawaii International Conference on System Sciences</i>, Spring 2009.</p> <p><i>A National Green Building Research Agenda</i>, published by US Green Building Council, November 2007.</p>
Academic and Professional Honors	Ginsberg Research Fellow, US Green Building Council, 2007-2008
Memberships	<p>Society of Building Science Educators</p> <p>American Solar Energy Society</p>

Name	Nicholas Bruscia
Courses Taught	<p>Fall 2014: ARC 605 Graduate Research Studio</p> <p>Summer 2014: ARC 605/406, ARC 596/11SA – Tokyo Study Abroad</p> <p>Spring 2014: ARC 547 Conditional Form</p> <p>Fall 2013: ARC 301 Junior Design Studio, ARC 411, ARC 611</p> <p>Spring 2013: ARC 547 Conditional Form</p> <p>Fall 2012: ARC 301 Junior Design Studio, ARC 411</p> <p>Summer 2012: ARC 605/406, ARC 596/11SA – Tokyo Study Abroad</p> <p>Spring 2012: ARC 605 Graduate Research Studio, ARC 547 Conditional Form</p>
Education	<p>University at Buffalo, Bachelor of Science in Architecture, 2005</p> <p>University at Buffalo, Master of Architecture, 2008</p> <p>University at Buffalo, Master of Fine Arts, 2008</p>
Teaching Experience	<p>University at Buffalo:</p> <p>Clinical Assistant Professor, Fall 2011 – Current</p> <p>Adjunct Assistant Professor, Fall 2008 – Spring 2011</p>
Professional Experience	Cannon Design: 2005 - 2008
Registration	
Publications	<p>Proceedings: 33rd International Conference - ACADIA 2013: <i>Adaptive Architecture</i>, Waterloo, Buffalo, Nottingham. Paper: "Material Parameters and Digitally Informed Fabrication of Textured Metals"</p> <p>Proceedings: 47th International Conference - ANZAScA 2014: <i>Cutting Edge</i>, Hong Kong. Paper: "Analysing Material Behavior Using Cold-Formed, Textured Stainless Steel"</p> <p>Proceedings: 19th International Conference - CAADRIA 2014: <i>Rethinking Comprehensive Design: Speculative Counterculture</i>, Kyoto. Short Paper / Poster: "Project 2XmT"</p>
Academic and Professional Honors	<p>2014:</p> <ul style="list-style-type: none"> - Winner: SKIN International Digital Fabrication Competition - Tex-Fab, Digital Fabrication Alliance - Winner: Best Fabrication Project: Architect's Newspaper Best-of Awards - Jury Winner: Architecture + Fabrication A+ Award – Architizer - Popular Choice Winner: Architecture + Fabrication A+ Award – Architizer - Jury Winner: Architecture + Materials A+ Award – Architizer <p>2011:</p> <ul style="list-style-type: none"> - Gary Day Award: "In honor of our appreciation to an outstanding professor for extraordinary dedication, leadership and devotion to the students." - SUNY Buffalo
Memberships	<p>Association for Computer Aided Design in Architecture (ACADIA)</p> <p>Architectural Science Association (ANZAScA)</p> <p>Association for Computer Aided Architectural Design Research in Asia (CAADRIA)</p> <p>Pecha Kucha Buffalo (Organizer)</p>

Name	Sean Burkholder
Courses Taught	ARC 301- Junior Studio ARC 314/514 END 275 – Discovering Landscape ARC 537- Urban Ecology and Systems ARC 579 – Urban Terrain and Soil ARC 605/6 – Ecological Practices Graduate Studios
Education	MLA, Harvard University, 2002 B.Arch, Miami University, 2000
Teaching Experience	<i>University at Buffalo:</i> Assistant Professor of Landscape and Urban Design – 2013 - current. <i>Montana State University:</i> Visiting Faculty, Dept. of Architecture – Summer 3013 <i>Pennsylvania State University:</i> Assistant Professor. Department of Landscape Architecture – 2009 - 2013. <i>The Ohio State University</i> Visiting Faculty, Dept. of Landscape Architecture – 2009 <i>Kent State University</i> Adjunct Professor, Dept. of Architecture – 2006 - 2009
Professional Experience	Landscape Affairs Group, Buffalo, NY. – 2013 - current Westlake Reed Leskosly, Cleveland, Ohio. – 2008 - 2009 Urban Design Collaborative, Cleveland, Ohio – 2005 - 2008 Studio Techne Architects, Cleveland, Ohio. – 2004 - 2005
Recent Publications	Peer-Reviewed Journals “The New Ecology of Vacancy” in <u>Sustainability Journal</u> MDPI (Basel) 2012 Articles Authored “Charted Displacement,” in <u>OnSite Review</u> issue 31. Ed. Stephanie White. 2014 “ The Geography of Geology” in <u>MONU</u> issue 20. Ed. Bernd Upmeyer. 2014 “1929” in <u>CLOG: Sci-Fi</u> . Ed. Kyle May, Julia Van Den Hout “The Pragmatics of Context” in <u>CLOG:BIG</u> . Ed. Kyle May. 2012 “What Not to Do” in <u>MONU</u> issue 14. Ed. Bernd Upmeyer
Academic and Professional Honors	AIDS Memorial Design Competition, NYC (Honorable Mention), 2012 Gowanus Lowline Competition, NYC (Honorable Mention), 2011 ONE Prize Competition, NYC (Semifinalist), 2011
Memberships	ASLA, ACSA, CELA, EDRA

Name	MJ Carroll
Courses Taught	ARC 211- Diversity and Design
Education	M.Arch, University at Buffalo, 2012 M.A. – The Ohio State University, 1982 B.A. – Ryerson University, 1981
Teaching Experience	Adjunct Professor <i>University at Buffalo: 2014</i> Professor, Interior Design, Sheridan College 1993-Present
Professional Experience	Freelance Interior Design Firm, 1987-2007 National Gallery of Art, 1983-1985
Registration	
Publications	<p>"Universal Design and Interior Design," in "Universal Design: Designing Inclusive" by Ed Steinfeld and Jordana Maisel, Wiley Publishing, 2011.</p> <p>"Text Legibility and Readability of Large Format Signs in Building and Sites", (January 2010), Design Resources, UDeworld, IDeA Center, Buffalo.</p> <p>"Aging in Place: Accessible, Rent-Geared-To-Income Housing for Unattached Older Women," (August 2006), SERC Annual Research Report.</p> <p>"Nursing Home Checklist," Inclusive Design Workshop Handbook, 2005</p>
Memberships	<p>Environmental Design Research Association, 2012-</p> <p>Association of Registered Interior Designers of Ontario, 2004-</p> <p>Member, Continuing Education Committee</p> <p>Member, Interior Design Continuing Education Committee, ASID</p> <p>Interior Design Educators Council, 1998-present</p> <p>Gerontological Association of America, 2003-2007</p>

Name	Brian Carter
Courses taught	ARC 503 Graduate Design Studio ARC 302 Undergraduate Design Studio ARC 492/592 FORMCHANGE ARC 404 Competition + Collaboration
Education	Nottingham School of Architecture, UK. Diploma(Architecture) 1963. University of Toronto, Canada. M. Arch., 1970
Teaching & Administrative Experience	Professor of Architecture, University at Buffalo, 2003- present. Dean, School of Architecture & Planning, UB, SUNY. 2003-2011 Pietro Belluschi Distinguished Visiting Professor in Architectural Design, University of Oregon, 2002 Professor of Architecture, University of Michigan, 1994-2002. Chair of Architecture, University of Michigan, 1994-2001.
Professional Experience	Arup Associates, London, UK. 1970-1994.
Registration	Architects' Registration Council of the United Kingdom, 1965
Publications	Selected books edited <i>Battersby Howat</i> , TUNS Press, 2013. <i>Designing & Building</i> , TUNS Press, Second edition published 2011. Selected book chapters/essays <i>Green Buildings Pay. Design, productivity and Ecology</i> . Third edition. Routledge, 2013. 'Fluid Geography', <i>Modern North</i> , Princeton Architectural Press, 2010. 'Comings & Goings', <i>Architectural Design</i> , 06/2010. Pp. 130-134. 'Idea Exchange', <i>Architects' Journal</i> , May 23, 2011. Pp. 26-35.
Academic and Professional Honors	
Memberships	

Name	Jordan Carver
Courses Taught	ARC 301 – Junior Studio ARC 588 – From Spatial Politics to Public Space, Seminar
Education	M.S. CCCP, Columbia University, 2012 M.Arch, Columbia University, 2011 B.S. Graphic Arts, Syracuse University, 2002
Teaching Experience	<i>University at Buffalo:</i> Peter Reyner Banham Fellow/Visiting Assistant Professor, 2014 – current <i>Columbia University:</i> Adjunct Assistant Professor of Architecture 2012 – 2014
Professional Experience	Managing Editor, GSAPP Books, New York, NY, 2014 – Present Contributing Editor, The Avery Review, 2014 – Present Co-Organizer, Who Builds Your Architecture?, 2012 – Present Founder, Experiments in Architecture and Research, New York, NY, 2008 – 2014 Designer/Project Manager, Monigle Associates, Denver, CO, 2005 – 2008
Registration	None
Publications	<i>Books edited:</i> Koolhaas, Rem, and Jorge Otero-Pailos. <u>Preservation is Overtaking Us</u> . Edited by Jordan Carver. New York: GSAPP Books, 2014. <u>Collecting Architecture Territories</u> . Edited by Craig Buckley, Jordan Carver and Mark Wasiuta. New York: GSAPP Books. 2013. <i>Essays authored:</i> Wilson, Mabel O., Jordan Carver and Kadambari Baxi. "Working Globally: The Human Networks of Transnational Architectural Projects." In <u>Architect as Worker</u> , edited by Peggy Deamer. New York: Bloomsbury, Forthcoming. Carver, Jordan. "Delaware Über Alles." <u>ARPA Journal</u> , no. 1 (2014). Carver, Jordan. "Guantanamo (north)." <u>Clog: Prisons</u> , (2014). Carver, Jordan. "Life by Architecture." <u>Volume</u> , no. 38 (2014). Carver, Jordan. "Architecture of Fear." Interview with Jessika Green. <u>Thinking in Practice</u> , September 9, 2013. Carver, Jordan. "An Atlas of Extraordinary Rendition." <u>PLAT</u> , no. 3.0 (2013): 38 – 47. Carver, Jordan and Andy Vann. "Hi, I'm in Delaware." <u>Pidgin</u> , no. 15 (2013): 6 – 11.
Academic and Professional Honors	New York State Council on the Arts (NYSCA) Independent Projects Grant, 2013 William Kinne Traveling Fellowship, Columbia University, 2011, 2012
Memberships	None

Name	Stephanie Cramer
Courses Taught	ARC 201- Sophomore Studio ARC 311 – Arch Media 3
Education	M.Arch, The Architectural Association, 03/2014 (expected) B.Arch, Rensselaer Polytechnic Institute, 2006
Teaching Experience	<i>University at Buffalo:</i> Adjunct Professor, 2014
Professional	Studio Jantzen, Associate 2011-2012 Behnisch Architekten, Project Architect 2006-2011 Michael Oatman: Falling Anvil Studios, Artist/Designer 2004-2006 Mesick Cohen Wilson Baker Architects, Intern 2000-2003
Registration	
Publications	
Academic and	
Memberships	AIA

Name	Anne Dafchik, AIA
Courses Taught	ARC 301 – Junior Studio, present
Education	M.Arch, SUNY University at Buffalo, 2007 B.S. (Arch), SUNY University at Buffalo, 2004
Teaching Experience	<i>University at Buffalo:</i> Adjunct Instructor, current Graduate Assistant, 2006-2007 Teaching Assistant, 2005
Professional Experience	Kideney Architects, Buffalo, NY, 2007 - present Aurora Architectural, Buffalo, NY, 2007 Bero Associates, Rochester NY, 2001, 2002, 2004
Registration	State of New York, License No. 034931 NCARB Certification LEED Accredited Professional (LEED AP)
Publications	
Academic and Professional Honors	Young Architect of the Year, AIA Buffalo / WNY, 2013 Alpha Rho Chi Medal, 2004
Memberships	American Institute of Architects (AIA) National Council of Architectural Registration Boards (NCARB),

Name	Matthew Dates, PE
Courses Taught	ARC 555 Structures 3
Education	ME Structural Engineering, Virginia Tech B.Arch, Virginia Tech BS Civil Engineering, Virginia Tech
Teaching Experience	<i>University at Buffalo:</i> Adjunct Professor, 2009 - Present
Professional Experience	<p>Cannon Design, Associate Vice President – Structural Engineer: 2011 - present Senior Structural Engineer for several projects including Novartis Biomedical Research Institute (Cambridge, MA), Roche Forum Building (Indianapolis, IN), Maryland Heights Community Center (Maryland Heights, MO), Roche Corporate Offices (Indianapolis, IN), Malcolm X College (Chicago, IL), Froedtert Hospital Milwaukee, WI), SUNY Oswego Rice Creek, St Bonaventure School of Business (Olean, NY). Site representative work for improvements at Coca Cola Field in Buffalo, NY.</p> <p>Wendel Companies, Associate Principal: 2006 - 2011 Program Manager (In charge of Design and Construction) for Design Lead Design Build projects including: - Seneca Class II casinos in Salamanca and Irving, NY - Maid of the Mist hotel improvements - Apache Nugget Travel and Gaming Center. Project Manager - Dunn Loring WMATA Improvement Facility Project Manager - Seneca Buffalo Creek Casino Project Manager - Maid of the Mist Warehouse Replacement</p> <p>Cannon Design, Structural Engineer: 2001-2006</p>
Registration	Professional Engineer: State of New York State of Missouri State of Indiana
Publications	
Academic and Professional Honors	Gary Day Outstanding Professor Award: 2009
Memberships	

Name	Stephanie Davidson
Courses Taught	ARC 101: Architectural Design Studio 1 ARC 202: Sophomore Studio ARC 491: Book Making ARC 511: Arch Comm 1 ARC 589: Kacheln
Education	Master of Architecture Professional Degree, Dalhousie University, Halifax Canada (2003-2004) AA Diploma School, Architectural Association School of Architecture, London England (2002-2003) Bachelor of Environmental Design Studies (Distinction), Dalhousie University, Halifax Canada (2000-2002) Bachelor of Fine Arts (Honours with Distinction), Mount Allison University, Sackville Canada (1996-2000)
Teaching and Administrative	University at Buffalo (SUNY), Buffalo NY (2011-present) RWTH Aachen University, Aachen Germany (2007-2010)
Professional Experience	Davidson Rafailidis, Berlin Germany and Buffalo NY (2007-present)
Registration	
Publications	Gagg, Russell. <i>Basics Interior Architecture: Texture + Materials</i> . Lancing England: AVA Academia, 2012. (2012 forthcoming) Knaak, Ulrich. <i>Performance Driven Envelopes</i> . Rotterdam: Uitgeverij 010 Publishers, 2011. (2011 forthcoming) Hildner, Claudia. "Selective Insulation". <i>Metamorphose Architectural Journal for Building Reuse</i> (2011 forthcoming) Rafailidis, Georg and Davidson, Stephanie, <i>Selective Insulation</i> . Barcelona: Eme3 Catalogue, 2011. (2011) Davidson, Tonya. <i>Hot Architecture</i> . Schöppingen: Stiftung Schöppingen, 2010. (2010) Rocca, Alessandro, ed. <i>Architecture Low Cost Low Tech</i> . Paris: Actes Sud, 2010 (2010) Serrats, Marta, ed. <i>150 Best Eco House Ideas</i> . Loft Publications, 2010 (2010) Brownell, Blaine, ed. <i>Transmaterial 3</i> , New York: Princeton Architectural Press, 2010. (2010) Kottas, Dimitris, ed. <i>New Building Material</i> . Barcelona: Links International, 2010. (2010) Rafailidis, Georg and Stephanie Davidson. <i>Thermometric Façade</i> . ARCH+, no.196 (2010) "Trigger Points". <i>Experimenta Magazine</i> , no.64, (2009) "Selective Insulation". <i>AWM Magazine</i> , no.28, (2009) "Selective Insulation". <i>ART – Das Kunstmagazin</i> , Aug. 2009 (2009) "Selective Insulation". <i>On Office</i> , Aug. 2009 (2009) "Selective Insulation". <i>de Architect</i> , Aug. 2009 (2009)
Academic and Professional Honors	Canada Council Research/Creation Grant for Emerging Artists (2011-2012) ContractWorld.Award, New Generation: Third Prize (2010) ContractWorld.Award, Shortlist Work Spaces: Selective Insulation (2009)

Simple Systems, Complex Capacities First Prize, International Architectural Competition (2009)
KWW (Art/Science/Economy) Stipend, Nordrhein-Westfalen Germany
Funded by the German Federal Government Nordrhein-Westfalen (2008)
Base Elements Stipend, Hexham UK
Architecture/Science collaboration, funded by the Arts Council North East England (2008-2009)

Memberships
Exhibitions

63rd Rochester-Finger Lakes exhibition, group exhibition, New York, USA (2011)
Eme3 International Architecture Festival, Barcelona Spain, July 1-3 (2011)
ContractWorld, group exhibition, Hannover Germany (2010)
Temporäre Kunsthalle Berlin, group exhibition and lecture, Schloßplatz Berlin Germany (2009)
Think Material, group exhibition, IDEX NEOCON architecture trade show, Toronto Canada (2009)
ACA Dovetail Gallery, group exhibition, Newcastle England (2009)
Conjunction, AiR Space Gallery, group exhibition, Stoke-on-Trent England (2009)
Love Design, Klaus Engelhorn Gallery, Vienna Design Week, group exhibition, Vienna Austria (2009)
Ceramics & Architecture, Dutch Design Week, group exhibition w. catalogue, Eindhoven the Netherlands (2009)
Labor Schöppingen, group exhibition, Schöppingen Germany (2009)
Kapfenberg Ceramics Biennale, group exhibition w. catalogue, Kapfenberg Austria (2009)

Name	Gregory Delaney
Courses Taught	ARC 121—Introduction to Architecture, Lecture ARC 201/2—Sophomore Studio ARC 231/531—Introduction to Architectural History I: Ancient to 1450, Lecture ARC 490/597—Exploring the American South I & II, Seminar & Travel Program ARC 490/597—Architecture of the West Coast I & II, Seminar & Travel Program
Education	M.A.S., The Ohio State University, 2010 B.S. Arch, The Ohio State University, 2008
Teaching Experience	<i>University at Buffalo, The State University of New York:</i> Clinical Assistant Professor, 2014–current Director of Recruitment and First Year Experience, 2014–current Adjunct Assistant Professor, 2011–2014 <i>The Ohio State University, Austin E. Knowlton School of Architecture. Columbus, OH:</i> Lecturer, 2010–2011, Summer 2013, Summer 2014
Professional Experience	
Registration	
Publications	Projects published in books: <u>Nano House</u> (Thames & Hudson, 2011) Articles authored: “Observations on Colbert,” in <u>Log</u> issue 24, <u>Architecture Criticism</u> . Editor: Cynthia Davidson. Publisher: Anyone Corporation (New York), 2012. “Building Momentum,” in <u>CMH Magazine</u> issue 4. Editor: Jon Theiss. 2010.
Academic and Professional Honors	Under Ten Award (The Ohio State University), 2011 2 nd Prize, Denman Research Forum (The Ohio State University), 2008
Memberships	ACSA

Name	Nerea Feliz
Courses Taught	ARC 202- Sophomore Studio ARC 301- Junior Studio ARC 403 – Comprehensive Studio ARC 491 – Design Methods, Seminar ARC 404/596 – Variable Organic Systems, Seminar
Education	M.Arch+B.Arch, ETSAM, Universidad Politecnica de Madrid, 2003.
Teaching Experience	<i>University at Buffalo:</i> Clinical Professor. Department of Architecture, 2012 - 2014. Adjunct Professor, 2010 - 2012
Professional Experience	MERCASA, Madrid, Spain, 2009-10 Foster and Partners, London, UK. 2008-9 Zaha Hadid Architects, London, UK. 2006-8 Foster and Partners, London, UK. 2004-6 Andrzej Blonski Architects. London, UK. 2003-4
Registration	Registered Architect, Colegio Oficial de Arquitectos de Madrid (COAM), Spain Registered Architect, ARB, UK.
Publications	Projects published in magazines/journals: <i>"Wondering Wardrobe"</i> Center 19: Curtains. Center for American Architecture & Design. 2014. Student work/Teaching published in magazines/journals: "Designing a future to take root at Botanical gardens" UB Reporter, 03-16-2013, "Architecture students envision future of Botanical Gardens" The Buffalo News, 04-05-2013. "What might a new addition to Botanical gardens look like?" Buffalo-Niagara Gardening, 03-19-2013.
Exhibitions	<i>"Curtains"</i> Exhibition: Goldsmith Hall, Mebane Gallery, Center for American Architecture and Design at the University of Austin, Texas. <i>"Reconstructing Practices"</i> , University at Buffalo, NY Exhibition featuring projects related to The Martell Symposium – Beyond Patronage: Reconsidering Models of Practice.
Academic and Professional Honors	"Curtains" Competition Finalist. Center of American Architecture and Design at the University of Texas, Austin.
Memberships	

Name	Laura Garofalo
Courses Taught	ARC 241-541 Introduction to Building Technology ARC 312 Architectural Media 4 ARC201 Sophomore Studio # 3 ARC202 Sophomore Studio # 4 (Coordinator) ARC 605/606 Ecological Practices Graduate Research Group Studios ARC 511 Graduate Architectural Media 1
Education	M. Arch, Yale University, 1995 B. Arch, University of Miami, 1991
Teaching and Administrative	<i>University at Buffalo:</i> Associate Professor, Department of Architecture, 2014- Current Assistant Professor, Department of Architecture, 2008-2014 Adjunct Assistant Professor, 2002-2007 Sophomore Studio (Coordinator) 2013-Present <i>North Carolina State University, Raleigh, NC:</i> Assistant Professor, 2007- 2008 <i>Boston Architecture Center, Boston, MA:</i> Instructor, 2000-2001 <i>University Of Miami, Miami, FL:</i> Instructor, 1998
Professional Experience	Liminal Projects, New York, NY- Cambridge, MA- Buffalo, NY, 1995-Present: Founding Partner Rothman and Associates, Boston, MA 2001-2002 Roberto Brambilla & Associates, New York, NY 1996-1999: Consultant
Registration	
Publications	Projects published in books: <u>Design Like You Give a Damn [2]: Building Change from the Ground Up</u> , (Abrams Books, London, 2012) <u>Vegetecture</u> , M. Corrado and M. Ferrari. Pozzuoli (eds.)(Sistemi Editoriali Esselibri Simone, 2011) Projects published in magazines/journals: <u>AD: The New Pastoralism: Landscape into Architecture</u> , (John Wiley & Sons Inc, NY 2013) Articles authored: "Against Romancing Ecology," in <u>Forward 212: Identity</u> v.12, no. 2 Olivia Graf Doyle, et al (eds.), Publisher: AIA (2012). "Fixing the Drape: Textile Composite Walls," in Gail Borden and Michael Meredith, (eds.), <u>Matter: Material Processes in Architectural Production</u> , London: Rutledge Press, Taylor & Francis Books, 2011) (W/ D. Hill) "The Garden in the Machine," in <u>Future Nature, Future Culture(s), Balance Unbalance 2013 International Conference Proceedings</u> , Davis, Susan (ed.), (Noosa: Biosphere Ltd Publisher, 2013)
Academic and Professional Honors	13th International Garden Festival, Jardins de Métis, Canada, Winner, 2012 Modern Atlanta Prize Competition, Second Prize, 2012 46th Central Glass International Architecture, Merit Prize, 2011 Charleston Transit Hub Design Competition: Architecture for Humanity, First Place , 2010 d3 Housing for Tomorrow Design Competition, First Place, 2010 ACSA Faculty Design Award, 2009 Best Paper Award _ ACSA NE Regional Conference, 2009 What If New York City: Post-disaster Housing Design Competition, winner, 2008 The Architectural League Prize: Young Architects: Scale Competition Winners, 1999
Memberships	ACSA

Name	Jordan Geiger
Courses Taught	ARC 491/691 / Zero Atmosphere Architecture ARC 597/404 / Orders of Magnitude ARC 597 / On Speed ARC 605 / Graduate Studios – ST Research Group ARC 202 / Sophomore Studio ARC 201 / Sophomore Studio
Education	Master of Architecture, Columbia University GSAPP, 1995 Bachelor of Arts, University of California at Berkeley, Comparative Literature (English / Italian), 1991
Teaching Experience	University at Buffalo, State University of New York, Assistant Professor, Department of Architecture 2009- California College of the Arts, San Francisco & Oakland Adjunct Professor in Architecture, 2000-2009 Coordinator, Undergraduate Architecture Studios, 2007-2009 University of California at Berkeley Lecturer, Department of Architecture, 1999, 2002 Akademie der Bildenden Künste / Academy of Fine Arts, Vienna Interim Assoc. Director of the Institute of Urbanism, Design Critic, 1995-1996
Professional Experience	Jordan Geiger / Large Interaction Design and Research, Principal, 2009- Ga-Ga Design Consultancy, Principal, 2002-2009 CCS Architecture, San Francisco, Designer, 2000-2002 Barrett-Quezada Architecture, San Francisco, Designer, 1999-2000 Field Paoli Architects, San Francisco, Designer, 1998-1999 Studio Daniel Libeskind, Berlin, Designer 1998 Dominique Perrault Architekten, Berlin, Designer 1994; 1996-1998 Michael Sorkin Studio, New York, Designer, 1995
Registration	
Publications	Geiger, Jordan, ed. Entr'acte. London and New York: Palgrave, 2015. Print. Geiger, Shepard, Khan, Ed.s MediaCities: Proceedings. Buffalo: University at Buffalo Department of Architecture, 2013. 320 Pages. Print and Online. Geiger, Jordan. "Zero Atmosphere Architecture." Bracket 3 [at Extremes]. Ed.s Lola Shepard and Maya Przybylski. Barcelona: Actar, 2014. Print. Geiger, Jordan. "Niagara." ARPA Journal, Ed. Janette Kim. New York: Columbia University GSAPP, 2014. Online. Geiger, Jordan. "Augmented Agriculture, Algorithms, Aerospace, and Alimentary Architectures." Eat, Cook, Grow: Mixing Human-Computer Interactions with Human-Food Interactions, Ed.s Marcus Foth and Jaz Choi. Cambridge, MA: MIT Press, 2013. Print.
Academic and Professional Honors	Techne Institute Fellowship, 2013
Memberships	ACADIA / Association for Computer Aided Design in Architecture ACM / Association for Computing Machinery ACSA / Association of Collegiate Schools of Architecture

Name	Peter Grace P.E.
Courses Taught	ARC 352/552 ARC 453/553
Education	University of Detroit, 1971 B.C.E. Massachusetts Institute of Technology, 1974 M.S.
Teaching Experience	<i>University at Buffalo: 2009-Present</i>
Professional Experience	Siracuse Engineers, PC, Senior Engineer, 2008 – Present Siracuse Engineers, LLP, Managing Partner, 1997-2008 Siracuse Engineers, Associate, 1987-1997 Joseph A. Siracuse, Consulting Engineer, Project Manager, 1984-1987 VSSR Architects/Engineers, Structural Engineer, 1974-1984
Registration	New York State P.E. Pennsylvania P.E. Michigan P.E. New Jersey P.E.
Academic and Professional Honors	Joseph A Siracuse Award, presented by the WNY Chapter of AIA, 2006 Thomas H McKaig Award, presented by the WNY Chapter of ACI, 1994 Past President of the Western NY Structural Clinic
Memberships	American Institute of Steel Construction American Concrete Institute American Society of Civil Engineers Construction Specifications Institute

Name	Miguel Guitart
Courses Taught	ARC 301 – Junior Studio ARC 489 – Special Topics: Filters, Energy and Space, Seminar
Education	Ph.D. Polytechnic University of Madrid, Spain, 2014 M.Arch, Harvard University, GSD, 2003 Architect, Polytechnic University of Madrid, Spain, 2000
Teaching Experience	<i>University at Buffalo UB:</i> Adjunct Assistant Professor, Department of Architecture, 2014 - current <i>University of Zaragoza UNIZAR, Spain:</i> Associate Professor. Department of Architecture, 2013 - 2014. <i>Pontifical University of Salamanca in Madrid UPSAM, Spain:</i> Associate Professor. Department of Architecture, 2006 - 2014.
Professional Experience	Gimeno Guitart, Madrid, Spain, 2008 - current Guitart Arquitectos, Madrid, Spain, 2003 - 2008 De Stefano + Partners, Chicago, IL., 2000 - 2001 Equator European Architects, Madrid, Spain, 1998 - 1999
Registration	Registered Architect. Spain. Colegio Oficial de Arquitectos de Madrid COAM
Publications	Books authorized: <i>Práctica Arquitectónica I.</i> (Ed.) Nobuko, Buenos Aires, 2014. <i>Proyectos UPSAM 2011-2012.</i> (Ed.) Pontifical U. of Salamanca. Madrid, 2012. <i>Proyectos UPSAM 2010-2011.</i> (Ed.) Pontifical U. of Salamanca. Madrid, 2011. Projects published in books: <i>JAE Jóvenes Arquitectos de España</i> , Ministry of Housing, Madrid, 2008. Projects published in magazines/journals: <i>Architecture</i> (2012), <i>Diseño Interior</i> (2008), <i>Metropolis Magazine</i> (2014), <i>Fidas</i> , Sevilla, (2005). Articles authored: «The Failed Utopia of a Modern African Vernacular: Hassan Fathy in New Gourná», in <i>Journal of Architectural Education JAE</i> 68:2, Association of Collegiate Schools of Architecture. ACSA. Washington D.C., 2014. «Void and Memory: Permanence in the Structures of Collective Spaces», in <i>CriticALL / I</i> , CriticALL Press. Madrid, 2014. «The Invisible Memory of the Urban Space», in <i>Sociedad y Utopía</i> , Pablo VI Foundation / Pontifical University of Salamanca. Salamanca, 2014. «Material Density in Ceramic Filters: From Mélnikov to Breuer. 1929-1959», in <i>Actas II Congreso Cerámica y Arquitectura</i> . Cátedra Cerámica. Madrid, 2014. «Naturalized Architecture and Architectural Nature: Effect and Mimic», in <i>National Congress on Material Strategies / Plant Architecture</i> . School of Architecture UFV. Francisco de Vitoria University. Madrid, 2014. «Production Strategies of Ceramic Filters», in <i>Actas I Congreso Cerámica y Arquitectura</i> . Madrid Cátedra Cerámica. Madrid, 2013. «Paisaje natural y paisaje mental», in <i>Interferencias</i> . Francisco de Vitoria University. Madrid, 2012. «Estrategias estructurales en las celosías cerámicas», in <i>Ensayos sobre Arquitectura y Cerámica</i> . Madrid Cátedra Cerámica. Madrid, 2011. «Las piedras del pasado», in <i>Arquitectura COAM</i> (359). COAM. Madrid, 2010. «Aproximaciones en torno a la celosía», in <i>Doctorate Research Publications</i> . Dep. Architecture. Madrid School of Architecture ETSAM. Madrid, 2009.
Academic and Professional Honors	PhD Summa Cum Laude. Fulbright Scholar 2001 - 2003. US Dep. of State / Sp. Ministry Foreign Affairs
Memberships	COAM, CSCAE / Harvard Alumni / Spanish Fulbright Association Board of Members

Name:	Hiroaki Hata
Courses Taught:	ARC 608+URP 581(+PD 499): Interdisciplinary-Graduate Urban Design Studios ARC/PD 565: Understanding Good Urban Form ARC/PD 566: Theories of Urban Settlement Patterns END 450: Environmental Design Workshop 3
Education:	Harvard University; Cambridge, MA, M. Arch in UD (advanced post-professional degree), 1978; Washington University, St. Louis, MO. M. Arch, 1969; Academy of Fine Arts, Tokyo, no degree conferred, 1962-63; B.A.in English and English Literature, Reitaku University, Chiba, Japan, 1963
Teaching Experience:	<i>University at Buffalo: Associate Professor of Architecture and Urban-Planning, Director of Urban Design Specialization Program in Department of Urban and Regional ; 2014-present</i> <i>Associate Professor of Architecture in Urban Design, 1985-present;</i> <i>Assistant Professor of Architecture in Urban Design, 1979-1985;</i> <i>New York Institute of Technology: Visiting Design Critic, 2000-2001;</i> <i>School of Architecture, Aarhus, Denmark: Visiting Associate Professor, 1985-1986;</i> <i>Harvard University, Graduate School of Design: Instructor, Career Discovery Program, summers 1978 and 1979;</i> <i>Teaching Assistant: Graduate Architecture Studio, spring 1978;</i> <i>Boston Architectural College: Instructor: Architecture and Urban Design Studios, 1972-73, 1976, 1979</i>
Professional Experience:	UBRI/UDP Critical Practices: 2013-present; H+W/Studio Architecture Urban Design: 2012-13; Hiro Hata Studio: Urban Design & Planning Consultant: 1976-2012 intermittent; HOK Planning Group, NY, NY, Urban Design Consultant, 2001-02; Pietro Belluschi and Jung-Brennen Associates, Boston, MA, Senior Project Designer, 1973-74; Sert, Jackson and Associates, Cambridge, MA, Senior Project Designer, 1971-73; Anselevicius Rupe/Associates, Cambridge, MA and St. Louis, MO, Senior Project Designer/ Co-Job Captain, 1974-1975; Junior Project Designer, 1969-1970
Registration:	Commonwealth of Massachusetts and State of New York
Publications:	"Pathways and artifacts: neighborhood design physical activity", Journal of Urbanism, vol 6, No.1, March, 2013, co-authored with Professors: Daniel Hess and Ernest Sternberg; Numerous Studio reports
Academic and Professional Honors:	A Design-Build Competition for the Milliard Fillmore Gates Circle Hospital, winner, A joint collaboration between Chason-Affinity and H+W Studio Architecture Urban Design, 2012;

Two Awards from American Planning Association: upstate and NYS, 1998;

The Buffalo Urban Retail Core International Design Competition, Third Prize, 1986 with HHL Architects;

Graham Scholar/Travelling Fellowship from Graham Foundation, 1968;

Widman Prize as the Best Architecture Student at Washington University, 1968

Memberships:

AIA

Name	Matthew Hume
Courses Taught	ARC 101- Freshman Studio ARC 102 - Freshmen Studio ARC 111 – Media 1 ARC 112 – Media 2 ARC 318/518 – Design Methods
Education	M.Arch, University at Buffalo, 2008 B.Arch, University at Buffalo, 2006
Teaching Experience	Adjunct Assistant Professor, 2008 - current Teaching Assistant, 2007 - 2008
Professional Experience	Hume Projects LLC, Corfu, NY, 2009 - current Kenneth MacKay Architecture, Buffalo, NY, 2013 – current Cannon Design, Grand Island, NY, 2008 - 2009
Registration	NA
Publications	<i>AD (Architecture Design) Magazine, Protocell Architecture (2011), Wood Design and Building Magazine (2010), Warped; Experiments in Ply Construction (2008),</i> Publication in Intersight Magazine v11 (2008), Publication in Intersight Magazine v10 (2007), Publication in Intersight Magazine v09 (2006), Publication in Intersight Magazine v08 (2005), Works chosen for display on Communications web site (2005).
Academic and Professional Honors	Chairs Award (2008), Cannon Design Scholarship (2007), Design excellence award in Architecture (2006), Design excellence award in Architecture (2003)
Memberships	LPA

Name	Joyce Hwang
Courses Taught	ARC 101- Freshman Studio ARC 301 – Junior Studio ARC 502- Graduate Studio, Year 1 ARC 605/6 – Ecological Practices Graduate Studios
Education	M.Arch, Princeton University, 2003 B.Arch, Cornell University, 1998
Teaching Experience	<i>University at Buffalo:</i> Associate Professor, Director of Professional Studies, 2013- current Assistant Professor, Department of Architecture, 2006 - 2013. Adjunct Assistant Professor, 2005 - 2006 <i>Temple University</i> , Tyler School of Art, Architecture Program. Philadelphia, PA: Adjunct Assistant Professor, 2003 - 2005
Professional Experience	Ants of the Prairie, Buffalo, NY, 2005- current MGA Partners, Philadelphia, PA, 2004 Agrest and Gandelsonas, New York, NY, 2003 Tonet Sunyer, Arquitecto, Barcelona, Spain. 2001 Carlos Ferrater, Arquitecto. Barcelona, Spain. 2000 Gary Handel and Associates. San Francisco, CA. 1999 McCall Design Group. San Francisco, CA. 1998
Registration	State of New York NCARB Certification
Publications	Projects published in books: <u>Natural Architecture Now</u> (Princeton Architectural Press, 2014), <u>Rough Guide to Sustainability– A Design Primer</u> (RIBA Publishing, 2014), <u>Contemporary Follies</u> (Monacelli Press, 2012), <u>My Green City: Back to Nature with Attitude and Style</u> (Gestalten Books, 2011), Projects published in magazines/journals: <u>Architect Magazine</u> (2014, 2012), <u>Metropolis Magazine</u> (2014, 2012), <u>The Dirt</u> (2014, 2010), <u>Architect's Newspaper</u> (2014), <u>AV Proyectos</u> (2014), <u>Azure Magazine</u> (2012, 2010), <u>The Scientist</u> (2012), <u>The Pop-Up City</u> (2012, 2010), <u>Praxis: Journal of Writing and Building</u> (2011), <u>Green Building and Design Magazine</u> (2011), <u>Good Magazine</u> (2010), <u>Metropolitan Field Guide</u> (2010), <u>Inhabitat</u> (2010), <u>The Chronicle of Higher Education</u> (2010). Articles authored: "Living Among Pests," in Arjen Oosterman, Brendan Cormier (eds.), <u>Volume</u> , issue 35, <u>Everything Under Control</u> , Archis (Amsterdam), 2013 (republished in <u>Next Nature</u>). "Vertical Farming in Las Vegas? Beyond Pragmatism, Toward Desire," in Mason White, Maya Przbylski (eds.), <u>Bracket</u> issue 1, <u>On Farming</u> , Actar (Barcelona, New York), 2010. "The New York Value Exchange" in <u>MONU</u> issue 12, <u>Real Urbanism</u> . Editors: Bernd Upmeyer, Beatriz Ramo. Publisher: BOARD (Rotterdam), 2010.
Academic and Professional Honors	Architectural League Emerging Voices Award, 2014 New York Foundation for the Arts (NYFA) Fellowship, 2013 New York State Council on the Arts (NYSCA) Independent Projects Grant, 2013, 2008 MacDowell Colony Fellowship, 2011 Baldy Center for Law and Social Policy Grant, 2010
Memberships	AIA, ACSA

Name	Omar Khan
Courses Taught	ARC 590- Architecture and the Information Environment, 2012, 2013 ARC 619- Architecture and Infomatics ARC 690- Relational Geometries, 2012 ARC 606- Situated Technologies Graduate Studio/Black Box Architecture, 2012
Education	SMArchS (Design and Computation), MIT, 2001 BArch, Cornell University, 1998
Teaching Experience	<i>University at Buffalo</i> : Chair, 2011-present Associate Professor, 2008-present Assistant Professor 2002 - 2008 <i>MIT</i> : Adjunct Professor, 2002
Professional Experience	Liminal Projects, New York, NY- Cambridge, MA- Buffalo, NY, 1995-Present: Founding Partner. Roberto Brambilla & Associates, New York, NY, 1993-1999: Project Architect Asymptote Architecture, New York, NY, 1992
Registration	In process
Publications	"Crowd Choreographies", in Geiger, J. (ed.) <i>EntreActe</i> , Palgrave, 2015 "Designing Responsive Architecture", in Space, No. 559, June 2014 "Black Boxes: Glimpses at an Autopoietic Architecture", in Lorenzo-Eiroa, P and A. Sprecher (ed.) <i>Architecture in Formation: On the Nature of Information in Digital Architecture</i> , Routledge, 2013. "A Communications Primer Revised", in Ayres, P (ed.) <i>Persistent Modeling - extending the role of architectural representation</i> , Routledge, 2012.
Exhibitions	<i>Eliciting Environments | Actuating Response</i> , Carnegie Mellon University, 2014
Academic and Professional Honors	2010 First Place, d3 Housing Tomorrow- International Architectural Design Competition. 2008 New York Foundation for the Arts Fellowship in Architecture/Environmental Structures 2007 New York State Council on the Arts (NYSCA) Grant
Memberships	Association of Collegiate Schools of Architecture (ACSA) Association for Computer-Aided Design in Architecture (ACADIA) American Society for Cybernetics (ASC) Special Interest Group on Computer Human Interaction (SIGCHI)

Name	Jean Lamarche
Courses	ARC 201- Sophomore Studios; ARC 605 - Graduate Studios; ARC 519 – Contemporary Theory in Architecture; ARC 589 – Phenomenology in Architecture ARC 501 – Graduate Design Studio 1
Education	D. Arch., University of Michigan, Ann Arbor, MI, 1995 B. Arch., Lawrence Technological University (LTU), 1981, cum laude B.S. in Architecture, magna cum laude, LTU, 1980, cum laude University of Houston, College of Architecture, Houston, TX, 1970-72, 1962-66
Teaching Experience	<i>University at Buffalo:</i> Associate Professor, 2002-present Assistant Professor, 1996-2002 Clinical Associate Professor, 1991-1996 Visiting Associate Professor, 1989-1991 <i>Lawrence Technological University:</i> Associate Professor, 1988-1989 Assistant Professor, 1983-1988 Lecturer, 1980-1983
Other Academic	International Design Olympiad, Ankara, Turkey, jurist (1 of 10), 2011 Antwerp Design Seminars and Lectures, Henry van de Velde Institute, Invited Workshop, 2008 Acting Chair, Department of Architecture, 2002-2003 Architecture Program Report 1997, 2002, 2008, 2011 Aarhus School of Architecture, Denmark seminars and studio workshop, 1995 Akademie der Künste, Architecture + Cinema Workshop, Berlin, Germany, 1991 Association of Collegiate Schools of Architecture Northeast Regional Meeting/ Conference: <i>Triangulating the Bodies of Architecture</i> 1996 (Chair)
Professional Experience	New Designs, Buffalo, NY 1995 – 2003 LaMarche Design, Detroit, Michigan 1976-1980 William E. Andrews, Architect, Sarnia, Ontario, 1975 Richard Fitzgerald and Associates, AIA Houston, Texas 1974 William R. Jenkins, FAIA Houston, Texas 1971 Neuhaus + Taylor (3D International), Houston, Texas 1966
Registration	
Publications	<i>The Familiar and the Unfamiliar in 20th Century Architecture</i> , Champaign, IL: University of Illinois Press, 2003; paperback version, fall 2008 "Surrealism and the Unexplored Possibilities in Architecture," <i>Surrealism and Architecture</i> , ed. Thomas Mical, New York: Routledge, 2004 "The Space of the Surface," <i>Environment and Planning A</i> , eds. Andrew Herod and Melissa W. Wright, 2001 December, 2205-2218 "Daniel Libeskind," "Bernard Tschumi," and "House," in <i>Encyclopedia of Twentieth Century Architecture</i> , 2003
Academic/ Professional Honors	University at Buffalo Conferences in the Disciplines Grant, 1996 Department of Comparative Literature-Associate Member, 1994-present American Institute of Architecture Students-Faculty Award, 1990, 1991, 1993 National Peace Garden Design Competition, Honorable Mention, 1989 University of Michigan Rackman Graduate School Fellowship, 1987, 1986 Association of Collegiate Schools of Architecture, Student Scholar, Cranbrook Teacher's Seminar, 1979
Memberships	ACSA

Name	Annette W. Lecuyer
Courses Taught	ARC 403 Senior studio ARC 442/542 Construction Technology ARC 504 Graduate studio (3.5 year program) ARC 449/549 Material Matters seminar
Education	Architectural Association. London, England: Graduate Diploma (Architectural History) 1980; Diploma (Architecture) 1981. University of Colorado, B.A. (with distinction), 1972.
Teaching Experience	Professor, The State University of New York at Buffalo, 2003-present. Masterclass, Berlage Institute, November 2004. Pietro Belluschi Distinguished Visiting Professor, University of Oregon, 2002. Associate Professor, University of Michigan, 1994-2002.
Professional Experience	Allies and Morrison, London, England, 1988-1994; Associate 1991-94. Jeremy Dixon/BDP, London, England, 1984-1988. Foster Associates, London, England, 1981-1984.
Registration	Architects' Registration Council of the United Kingdom, 1982.
Publications	author: <i>ETFE – Technology and Design</i> (Birkhauser, 2008). English, German, Chinese editions. <i>Steel and Beyond – New Strategies for Metals in Architecture</i> (Birkhauser, 2003). English, German, Chinese editions. <i>Radical Tectonics</i> (Thames and Hudson, 2001). co-author: <i>All-American: Innovation in American Architecture</i> (Thames and Hudson, 2002). “Off the Radar,” <i>Architectural Design</i> , January/February 2003. Chapters: <i>Norman Foster, Works 6</i> (Prestel 2013) pp. 125-129, 419-422, 394-407. <i>Norman Foster, Works 5</i> (Prestel 2009) pp. 394-407, 410-423. <i>Norman Foster, Works 3</i> , (Prestel, 2007) pp. 120-127, 140-143, 200-205, 252-261. “The critical eye. Diller Scofidio + Renfro, Eyebeam Museum of Art and Technology,” <i>Museums in the 21st Century - Concepts, Projects, Buildings</i> . (Prestel, 2006) pp.170-175. <i>Norman Foster, Works 4</i> , (Prestel, 2004) pp. 94-129, 408-417, 424-425. Editor: Dalhousie Architectural Press, editor, <i>The Passage of Time</i> , 2014. <i>buffaloBOOKS</i> . Editor/co-editor of 5 books, 2003-2010. <i>Michigan Architecture Papers</i> . Editor of 12 books; co-editor of 4 books, 1995-2002. Guest editor/author. <i>The Architectural Review</i> , October 2004: Canada Guest editor. <i>The Architectural Review</i> , November 2003: American Frontiers Guest editor. <i>The Architectural Review</i> , November 1997: Art + Industry in America. “Die Materialisierung des Digitalen,” <i>Arch +</i> , October 2008. “Midwest Modesty,” <i>The Architectural Review</i> , June 2006. (David Chipperfield) “Extending Eclecticism,” <i>The Architectural Review</i> , August 2005. (Herzog + de Meuron) “Studio 804, Modular House 1, <i>de Architect detail</i> (Netherlands), April 2005.
Academic and Professional Honors	Teaching Award, Graduate Student Association in Architecture, Buffalo, 2013. Arthur F.Thurnau Professorship, University of Michigan, 2002. Excellence in Teaching Award, Architecture Program, Michigan, 1996, 1999, 2001. Michigan Association of Governing Bodies Distinguished Faculty Award, 2000. ACSA/AIAS New Faculty Teaching Award, 1998-99. AIA International Book Award, 1998 (Michigan Architecture Papers) Fellow, Royal Society of Arts (UK), 1998. RIBA Award, 1996 (Rosalind Franklin Building, Newnham College, Cambridge). RIBA Award, 1996 (Nunnery Square, Sheffield).
Memberships	Association of Collegiate Schools of Architecture (ACSA)

Name	Sergio Lopez-Piñeiro
Courses Taught	ARC 202- Sophomore Studio ARC 403- Senior Studio
Education	M. Arch., Princeton University, NJ, 2004 Architect, Polytechnic University of Madrid, Spain, 1998
Teaching Experience	<i>University at Buffalo:</i> Assistant Professor, 2007 – 2013 Reyner Banham Fellow, 2006 – 2007 Clinical Assistant Professor, Spring 2006 <i>Institute for Advanced Architecture of Catalonia, Barcelona, Spain:</i> Visiting Lecturer, Fall 2005 <i>Temple University, PA:</i> Adjunct Assistant Professor, 2004 – 2005 <i>University of California at Berkeley, CA:</i> Lecturer, Summer 2004
Professional Experience	Holes of Matter, Buffalo, NY, 2005 – present Foreign Office Architects, London, UK, 2000 – 2002 NoMad, Madrid, Spain, 1998 – 2000
Registration	Registered Architect, Colegio Oficial de Arquitectos de Madrid (COAM), Spain
Publications	In progress: "White Space" in Clare Lyster, Charles Waldheim, Mason White (eds.), <i>Third Coast Atlas</i> In progress: "Olmsted's Blank Snow," Bracket, no. 2 (2011) "Scenes in a Concrete Deserta" in Mehrdad Hadighi (ed.), <i>Banham in Buffalo: 5 Years of the Peter Reyner Banham Fellowship at the University at Buffalo Department of Architecture</i> (Singapore: Oro Editions, 2011), 30-49 "Sizing Identities," e-Architect (January 11, 2011) [Online] "Reconsidering the Enabling Architect," arq: Architectural Research Quarterly, vol. 14, no. 3 (2010): 286-288 "How to Do a Thesis: Practice Models as Instigators of Academic Theses" in Bruce Goodwin, Judith Kinnard (eds.), <i>Re:Building</i> (Washington DC: ACSA Press, 2010), 798-803 "White Space," Places (December 17, 2009) [Online]
Academic and Professional Honors	
Memberships	Association of Collegiate Schools of Architecture (ACSA), USA

Name	Kenneth S. MacKay, AIA
Courses Taught	ARC 302- Junior Comprehensive Studio; Spring 2013 & 2014 ARC 605-5- Inclusive Design/Graduate Comprehensive Studio; Fall 2013 ARC 605-5- Graduate Comprehensive Studio; Fall 2014 ARC 482/582 Professional Practice; Spring 2012, 2013, 2014 ARC 362/562 Performance Programming; Fall 2012
Education	M. Arch., University at Buffalo, Buffalo, NY, 1985 B. Art, Colgate University, Hamilton, NY, 1979
Teaching Experience	<i>University at Buffalo:</i> Clinical Associate Professor; 2010 to present Assistant Professor, 2002 to present Clinical Associate Professor, 2001 to 2002 Studio Instructor, 1995 to 2000 <i>University at Buffalo – Millard Fillmore College</i> Studio Instructor, 1988 to 1994
Professional Experience	Kenneth MacKay Architecture, Kenmore, NY – 1995 to present Fontanese, Folts, Aubrecht-Architects, PC, East Aurora, NY – 1985 to 1995 City of Buffalo/Department of Community Development – 1984 to 1985 Steiglitz, Steiglitz, Tries-Architects, Buffalo, NY – 1983 to 1984 Peter G. Castle-Architect, Buffalo, NY – 1982 to 1983
Registration	New York State license # 018310-1
Academic and Professional Honors	2013: AIA-Buffalo/WNY Chapter 'Mentor of the Year Award' 2008: Graduate Student Association Department of Architecture/UB, Gary Day Award 2004: AIA-Buffalo/WNY Chapter First Award for New Construction Total Aging in Place Adult Daycare Center and Senior Housing – Amherst, NY 1995: Buffalo First 40 Under 40 1994: Department of Architecture/UB, Certificate of Appreciation 1992: AIA-Buffalo/WNY Chapter First Award Fountain Plaza Service Building – Buffalo, NY 1992: NY State Association of Architects Community Design Award Fountain Plaza - Buffalo, NY 1991: AIA-Buffalo/WNY Chapter Honor Award Moog Employee Federal Credit Union – Elma, NY
Memberships	AIA: American Institute of Architects IESNA: Illuminating Engineers Society of North America
Grants	2009: Principal Investigator-“The AIA's Consent Decree: Ensuring Free Trade or Hindering Diversity?” Baldy Center for Law and Social Policy, University at Buffalo Law School. Grant amount: \$750 (+ \$250 matching department funds) 2008: Principal Investigator-“Integrating Technology and Design in Architectural Education”, United States Department of Education Comprehensive Program Fund for the Improvement of Postsecondary Education, FIPSE Grant amount: \$116,000 2006-2007. Co-Principal Investigator- “Integrating Technology and Design in Architectural Education”, with Shahin Vassigh, Scott Danford, Dennis Andrejko, Omar Khan, Annette Lecuyer; United States Department of Education Comprehensive Program Fund for the Improvement of Postsecondary Education, FIPSE Grant amount: \$553,000

Name	Dennis Maher
Courses Taught	ARC 102 Design Studio ARC 201/202 Design Studio ARC 605/607 Design Studio, Material Culture Research Group ARC 512 Communications Barcelona Study Abroad Program, Director
Education	B.ARCH Cornell University, 1998
Teaching Experience	<i>University at Buffalo:</i> Clinical Assistant Professor, Fall 2010 – Current Adjunct Assistant Professor, Fall 2004 – Spring 2010
Professional Experience (selected exhibitions)	<i>House of Collective Repair</i> , 2013 Albright-Knox Art Gallery <i>House of the Unmaker</i> , 2012 Real Art Ways, Hartford, CT <i>Pittsburgh Biennial</i> , 2011 Pittsburgh Center for the Arts, Pittsburgh, PA <i>Neglect of Finish / End Wall</i> , 2010 Black and White Gallery and Project Space, Brooklyn, NY <i>Beyond/In Western New York Biennial</i> , 2010 Burchfield Penney Art Center, Buffalo, NY <i>Unplanned</i> , 2010 Superfront, Los Angeles, CA <i>Excerpts from the Farrar Mansion Project</i> , 2010 Carnegie Visual and Performing Arts Center, Covington, KY <i>Pre-Post-Anew</i> , 2010 Buffalo Arts Studio, Buffalo, NY <i>Siete Mirades Absents</i> , 2009 Galeria Antoni Pinyol, Reus, Spain
Registration	
Publications	<i>The Fargo House</i> , in <u>Ineffably Urban</u> <i>600 Miles to Paradise</i> , in <u>Architecture Post-Mortem</u> <i>On the Battle for the Afterlives of Post-Mortem Architecture</i> , in ACSA Conference Proceedings, 2011 <i>The Nightworks</i> , in <i>Unplanned: Research and Experiments at the Urban Scale</i> , 2010 <i>Inside the Hollow Core</i> , in ACSA Conference Proceedings, 2009
Academic and Professional Honors	New York Foundation for the Arts (NYFA) Fellowship, 2013 Albright Knox Art Gallery, Artist-in-Residence Award, 2012 Real Art Ways Step-Up Award, 2011 John R. Oishei Foundation, Buffalo 20 Leaders Group, 2011 Black and White Project Space Prize, 2010 New York State Council on the Arts (NYSCA) Independent Projects Grant, 2010 MacDowell Colony Fellowship, 2008
Memberships	The Fargo House, Founder/Director

Name	Virginia Melnyk
Courses Taught	ARC 201 – Sophomore Studio ARC 611 – Media 3
Education	M.Arch, University of Pennsylvania School of Design, 2010 B.S. in Architecture, University at Buffalo, 2007
Teaching Experience	<i>University at Buffalo:</i> Adjunct Assistant Professor, 2014-2015 <i>University of Pennsylvania:</i> Lecturer, 2011 Research Assistant, 2010
Professional Experience	Studio Pei Zhu, Beijing, PRC, 2011- 2014 Acconci Studio, New York, NY, 2011 HWKN, New York, NY, 2011 Emergent, Los Angeles, CA, 2010
Registration	
Publications	Projects published in books: <u>Meander: Variegating Architecture</u> (Bently Institute Press, 2010) Projects published in magazines/journals: <u>Song Ya Feng: That's Art Magazine</u> (Issue No. 8 2013), FLAIR; Arab-International Luxury Living Magazine (October 2011)
Academic and Professional Honors	Runner Up, GE Garages Making things, Architizer.com Competition, 2012 Honorable mention, Future Grid New York architecture league competition, 2011 Second Place, Kehilla's Sukkahvile Toronto, 2011 Third place, Schenk-Woodman Student Competition University of Pennsylvania, 2008
Memberships	

Name	Joyce Oakley
Courses Taught	ARC 201- Sophomore Studio
Education	M.Arch, University at Buffalo, 2007 BS Art/Religion, University at Rochester, 1996
Teaching Experience	<i>University at Buffalo:</i> Adjunct Assistant Professor, 2007, 2008, 2012
Professional Experience	John Wingfelder Architect, Buffalo, NY, 2006 Bonnie Ott Architect, Buffalo, NY 2004-2005 Albright Knox Art Gallery, Buffalo, NY 2004 Marc diVincenzo Artists, Buffalo, NY 2001-2002
Registration	
Publications	<p>"Synaesthesia" M.Arch, State University at Buffalo, 2007, AAT 1446243, proquesst.umi.com</p> <p>"Between Now & There: Databodies and Sentient Spaces". Intersight v. 10.07, Journal of the School of Architecture and Planning, UB SUNY</p> <p>"Responsive Architecture", UB Dept. of Architecture and Media Study UB, Center for the Arts, 04.2007</p> <p>"Document", UB Dept. of Architecture, 05.2005</p> <p>"Techne, 2006", UB Dept. of Architecture</p> <p>"Elemental House", Intersight v. 9.06 Journal of the School of Architecture and Planning, UB SUNY</p> <p>"21st Century Infrastructures", Intersight v. 9.06 Journal of the School of Architecture and Planning, UB SUNY</p> <p>"Elemental House", UB Dept. of Architecture 12.05 UB Anderson Gallery</p> <p>"Extreme Abstraction" Albright Knox Art Gallery</p>
Academic and Professional Honors	
Memberships	

Name	Shayne O'Neil
Courses Taught	ARC 605 Graduate Research Studios
Education	M.Arch, Harvard University, 1984 BA Philosophy, University of California, 1977
Teaching Experience	Adjunct Instructor, University at Buffalo <i>UB:2001, 2012, 2013</i> Visiting Professor, Cornell University, 1988-1991 1992, 1993 Visiting Professor, Massachusetts Institute of Technology, 1991, 1992 Assistant Professor, Rhode Island School of Design, 1984-1988
Professional Experience	O'Neil Studio, Principal, 1985-Present Koetter, Kim & Associates, Designer, 1983-1985 Dennis & Clark, Designer, 1983 Machado/Silvetti, Designer, 1982
Registration	
Publications	"The Art of the Frame: the Sculpture of Jedd Novalt", 1998 "Surface (Dis)-Tensions", review by Donna Schumacher, 1997 "Infidelic Geographies: Latent Territories", 1996 "Analogues and Travelogues" in Media of Representation, 1996 "Territorial Refrain", 1992 "Sites, Shifters and Slowdowns", 1991 "Project Atlas" Bulletin Series #2, 1991 "Project Atlas" 12/90, 1990 "Dis-Programming" Competition: No. 65 January, 1990 "Rhetorical Uses of the Object", 1990 "West Coast Gateway" No. 90:02, 233 February, 1990 "Design as Research: Naturalized Architectures", 1990 "In the Margins: Three Studios", 1986 "Precedent and Invention", Editorial Board, 1985
Academic and Professional Honors	San Francisco Prize, Finalist International Design Competition for the Philip Burton Federal Building Plaza, 1996 New England Arts Foundation, Grant for Aedes Gallery, Berlin, Germany, 1993 Storefront for Art and Architecture, Final Selection, "Projected Atlas", 1990 Japan Architect, First Place Award, Shinkenchiku Design Competition, 1989 City of Los Angeles, First Place Award, West Coast Gateway Competition, 1988 Journal of Architectural Education, Editorial Selection, 1988
Memberships	

Name	Erkin Ozay
Courses Taught	ARC 403 - Senior Studio
Education	M.Arch, Harvard University, 2001 B.Arch, Middle East Technical University, 1998
Teaching Experience	<i>University at Buffalo</i> , School of Architecture and Planning: Assistant Professor. Department of Architecture, 2014 – current. <i>Harvard University</i> , Graduate School of Design: Lecturer, Department of Urban Planning and Design, 2011 – 2014. <i>University of Toronto</i> , Daniels Faculty of Architecture, Landscape, and Design: Visiting Lecturer, Department of Architecture, 2012. <i>Northeastern University</i> , School of Architecture: Lecturer, 2010-2011. Adjunct Studio Instructor, 2009. <i>Boston Architectural Center</i> , Architecture Program: Adjunct Studio Instructor, 2000.
Professional Experience	the Ozay Office. Cambridge, MA. 2011 – current ETALstudio. Lincoln, MA. 2009 – 2011 Peter Rose and Partners. Cambridge, MA. 2005 – 2009 Foster and Partners. London, UK. 2001 Douglas Adams and Associates. Waltham, MA. 2001 – 2004 Hashim Sarkis Studios. Cambridge, MA. 2001 Teget Architects. Istanbul, Turkey. 1998 – 1999
Registration	Commonwealth of Massachusetts NCARB Certification
Publications	Projects published in magazines/journals: <u>Architectural Record</u> (2006) Articles authored: “Grand Manner Alla Turca” in Ila Berman and Edward Mitchell, eds., <u>ACSA 101st Conference Proceedings-New Constellations New Ecologies</u> (2013)
Academic and Professional Honors	Aga Khan Fellow, Harvard Graduate School of Design, 2011 – 2013 Architectural Record, High Density Competition, 2006 Venice Architectural Biennale, exhibited in American Pavilion, 2006 Steedman Fellowship Competition, Washington University at St.Louis, mention, 2004
Memberships	ACSA, Turkish Chamber of Architects

Name	Georg Rafailidis
Courses Taught	ARC 102: Freshman Studio ARC 201: Sophomore Studio ARC 493/593: Special Topics: Exquisite Corpse1 ARC 592/4: Graduate Seminar Intellectual Domain ARC 605/7: Graduate Design Studio
Education	Architectural Association, London England (2001–2003) University of Applied Sciences, Munich Germany (1994–2000)
Teaching Experience	University at Buffalo (SUNY), Buffalo NY (2010-present) RWTH Aachen University, Aachen Germany (2005 – 2010)
Professional Experience	Davidson Rafailidis, Buffalo NY (2010-present) Herzog & de Meuron, Basle Switzerland (2003-2005)
Registration	Licensed architect in the EU, #13303, Institute of Architects Berlin Germany
Publications Since 2012	Articles authored: <u>Generative Spatial Processes</u> (30 th NCBDS, 2014), <u>Stack: Using Dry-Stacked Compressive Structural Systems</u> (Sustainable Structures Symposium, 2014), <u>Free Zoning</u> (Bracket 3, 2014), <u>MirrorMirror</u> (Forward 213, 2013), <u>Free Zoning</u> (ACSA Press, 2013), <u>Thermometric House</u> (Engineered Transparencies, 2012), <u>Continual House</u> (CIG, 2012) Projects reviewed: <u>Architect as Initiator</u> (Actar, 2014), <u>Big Ideas, Big Appetite</u> (Wall Street Journal, 2013), <u>Reinventing the Strip Mall</u> (University of Alberta Press, 2012), <u>At the Mall, Parks and Sermons Replace Stores</u> (New York Times, 2012), <u>Thermometric Façade</u> (ARCHITECT, July 2012), <u>Material Matters</u> (Black Dog Publishing, 2012), <u>Basics Interior Architecture: Texture + Materials</u> (AVA Academia, 2012)
Academic and Professional Honors Since 2012	<u>People's Choice Award Azure magazine</u> (Canada, 2014), <u>Award of Merit Azure magazine</u> (Canada, 2014), <u>Honorable Mention International Design Awards</u> (USA, 2014), <u>Mac Dowell Fellow</u> (USA, 2014), <u>Winner StreeFest Biennial architectural competition organized by the Storefront for Art and Architecture and the New Museum</u> (USA, 2013), <u>Finalist Folly 2013 Annual architectural competition organized by The Architectural League of New York</u> (USA 2013), <u>Winner Strip Appeal, Reinventing The Strip Mall</u> (CA, 2012), <u>Honorable mention, R+D Awards Architect Magazine</u> (USA, 2012)
Exhibitions Since 2012	<u>Bio 50 24th Biennial of Design Ljubljana</u> (Slovenia, 2014), <u>f(c) Portrait Society</u> (USA 2014), <u>Architecture Gallery Harborfront Centre Toronto</u> (Canada, 2014), <u>Albright Knox Art Gallery</u> (USA, 2014), <u>Canalside Buffalo</u> (USA, 2014), <u>New Museum</u> (USA, 2013), <u>Echo Art Fair</u> (USA, 2013), <u>Instituto de Arquitetos do Brasil Departamento</u> (Brasil 2013), <u>CCA San Francisco</u> (USA, 2013), <u>University of Calgary</u> (Canada, 2013), <u>Think:Material Material World Pavillion</u> (Canada, 2012), <u>Architects@work</u> (NL, 2012), <u>Eme3 7th International Architecture Festival</u> <u>COAC Col·legi d'Arquitectes de Catalunya</u> (Spain, 2012), <u>MUDAC Musée de design et d'Arts Appliqués Contemporains</u> Lausanne (Switzerland, 2012)
Memberships	Institute of Architects Berlin Germany (Architektenkammer Berlin)

Name	Nicholas B. Rajkovich
Courses Taught	ARC 241-541 – Introduction to Building Technology
Education	PhD, Urban and Regional Planning, University of Michigan, 2014 M.Arch, University of Oregon, 2002 B.Arch, Cornell University, 2000
Teaching Experience	<i>University at Buffalo:</i> Assistant Professor, Department of Architecture, 2014 – current <i>Cornell University</i> , Department of Architecture, Ithaca, New York: Visiting Assistant Professor, 2004 - 2006
Professional Experience	Senior Program Engineer, PG&E, San Francisco, CA, 2007–2009. Project Manager, Riecke Sunnland Kono Architects, Ltd., Kahului, HI, 2006–2007. Associate, Einhorn Yaffee Prescott A & E, P.C., Albany, NY, 2002–2004
Registrations	State of Ohio ARC.0814737, 2008-current NCARB Certification, #67940, 2009-current
Publications	Rajkovich, Nicholas B., Alison G. Kwok, and Larissa S. Larsen. 2013. LEED, collaborative rationality, and green building public policy. In <i>Constructing Green: The Social Structures of Sustainability</i> , edited by Rebecca Henn and Andrew Hoffman. Cambridge, Massachusetts: MIT Press. Rajkovich, Nicholas B., William C. Miller, and Roland J. Risser. 2013. The prospect of zero net energy buildings in the United States. In <i>Energy Efficiency: Towards the End of Demand Growth</i> , edited by F. P. Sioshansi. Waltham, Massachusetts: Academic Press. Walliser, Andres, Nicholas B. Rajkovich, and John Forester. 2012. Exploring the Challenges of Environmental Planning and Green Design: Cases from Europe and the USA. <i>Planning Theory & Practice</i> 13 (1): 113-115. Pyke, Chris, Sean McMahon, Larissa Larsen, Nicholas B. Rajkovich, and Adam Rohloff. 2012. Development and analysis of Climate Sensitivity and Climate Adaptation opportunities indices for buildings. <i>Building and Environment</i> 55(9): 141-149. Conlon, Kathryn C., Rajkovich, Nicholas B., White-Newsome, Jalonnie., Larsen, Larissa, & Marie S. O'Neill. 2011. Preventing cold-related morbidity and mortality in a changing climate. <i>Maturitas</i> 69 (3): 197-202. Rajkovich, Nicholas B., William C. Miller, and Anna M. LaRue. 2011. Zeroing in on Zero Net Energy. In <i>Energy, Sustainability, and the Environment: Technology, Incentives, Behavior</i> , edited by F. P. Sioshansi. Burlington, Massachusetts: Butterworth-Heinemann. Kwok, Alison G., and Nicholas B. Rajkovich. 2010. Addressing climate change in comfort standards. <i>Building and Environment</i> 45(1): 18-22.
Academic and Professional Honors	Graduate Research Fellowship from the National Science Foundation (NSF) American Institute of Architects (AIA) San Francisco Presidential Commendation for chairing the Committee on the Environment, 2008. Martin Dominquez Award for Distinguished Teaching awarded by the College of Architecture, Art, and Planning at Cornell University, 2006. Architecture Research Centers Consortium King Student Medal for Architectural Research, 2002.
Memberships	AIA, Society of Building Science Educators, ACSA

Name	James Rayburg
Courses Taught	ARC 301, Junior Studio 2013
Education	M.Arch 2 Cornell University M.Arch University at Buffalo BA History, University at Buffalo
Teaching Experience	Adjunct Assistant Professor, <i>University at Buffalo: 2001-2013</i>
Professional Experience	Cannon Design, Vice President: 2001- Present Senior project designer working on large institutional projects primarily in the College and University and Healthcare Marketplace. Specializing in Student Residence Halls, and large science complexes and Mental Health Facilities.
Registration	
Publications	Young Architects, Inhabiting Identity, House: Case Study, Cleveland Princeton Architectural Press, Cornell Journal of Architecture, Issue 7, The future of Permanence, Building/Machine
Academic and Professional Honors	Medaille College; American Institute of Architects, Western NY Honorable Mention – Campus Center Kean University AIA Merit-Award, Western New York AIA, 2011 SARA New York State University of New York at Buffalo, AIA Honor Award, Western NY
Memberships	

Name	Michael Rogers
Courses Taught	ARC 201 Sophomore Studio 1 ARC 404-518 Design by Number ARC 611 Computer Modeling
Education	B.Arch Roger Williams University, 2006 M.Arch Architectural Association – Design Research Laboratory, 2011
Teaching Experience	University at Buffalo: Adjunct Professor 2011-2013
Professional Experience	MinimaForms, London, UK Algorithmic Design Consultant 2011 Architectural Association, London, UK, Exhibition Coordinator 2010 Cannon Design, Buffalo, NY, Designer / BIM Specialist 2007 –2009
Registrations	LEED Accredited Professional
Publications	Formicis: A Study in Behavioral Componentry” Adaptive Architecture: ACADIA Conference Proceedings 2013 “ <i>The Formicis and Arctic Flowers Series</i> ” Beijing Design Week Guide Book 2012 “ <i>Biomimetic Structures: Formicis and Arctic Flowers</i> ” E-Architect 2012 “ <i>Flexible Componentry</i> ” Fashion Beijing Magazine, Issue 80-515 2012 “ <i>No Man’s Land</i> ” ARXEIO, Issue 8: Nyknothtee 2010
Academic and Professional Experience	1st Place, Bike Works Mobile Classroom Competition, Bike Works International, Seattle WA 2008 Arcadian Award \$40,000 scholarship, Arcadian Foundation, Newark NY 2000 Cross-Cultural Research Grant Beijing, Confucius Institute, Buffalo NY 2012 Chair’s Independent Research Grant, University at Buffalo, Buffalo NY 2012 Academic Research Grant, University at Buffalo, Buffalo NY 2012 Titus Research Grant in Architecture, Titus Foundation, Rochester, NY 2011 Research Grant, Center for Undergraduate Research at University at Buffalo, Buffalo NY 2011 United Union Professionals Grant for Professional Development, Buffalo NY 2011
Memberships	Green Building Certification Institute Alpha Chi National Honor Society Tau Beta National Architecture Honor Society

Name	Christopher Romano
Courses Taught	ARC 101 - Freshman Studio ARC 302 - Junior Comprehensive Studio ARC 550 - Texture and Tectonics, Seminar ARC 592 - The State of Materials, Seminar ARC 550 - Additive and Subtractive Manufacturing, Seminar
Education	Master of Architecture, University at Buffalo SUNY, 2005 B.S. in Architecture, University at Buffalo SUNY, 2003
Teaching Experience	<i>University at Buffalo:</i> Research Assistant Professor, Department of Architecture, 2012 - current Clinical Assistant Professor, Department of Architecture, 2010 - 2012 Adjunct Assistant Professor, Department of Architecture, 2005 - 2010
Professional Experience	Absolute Joint System, London, England, 2014 - current Rigidized Metals Corporation, Buffalo, NY, 2014 - current Studio North Architecture, Buffalo, NY, 2010 - current Ro.Jo design LLC, Buffalo, NY, 2006 - current Mehrdad Hadighi / Studio for Architecture, Buffalo, NY, 2005 - 2010 Mark Anthony Architects, Merrick, NY, 2001
Registration	NCARB Certification, 2012 Registered Architect, State of New York, 2011 USGBC LEED 2.0 Accredited Professional, 2004
Publications	Projects published in books: <u>A Lasting Impression: Rigidized Metals and its Enduring Idea</u> (Stonecroft Publishing, 2014). Projects published in magazines/journals: <u>Texas Architects Magazine</u> (2014), <u>Metropolis Magazine</u> (2014), <u>Architect's Newspaper</u> (2014), <u>Inhabitat</u> (2014), <u>Domus</u> (2012). Articles authored: "Collaborative Models between Academia and Industry: Thought Experiments and Applicability," Emerging Design and Technology, 2014 TxA Conference Proceedings, 2014. "Analyzing Material Behavior using Cold-Formed, Textured Stainless Steel," Cutting Edge, 2013 ASA Conference Proceedings - pp. 579-588, 2013. "Material Parameters and Digitally Informed Fabrication of Textured Metals," Adaptive Architecture, 2013 ACADIA Conference Proceedings - pp. 61-68, 2013. "The Living Wall: A Microcosm of Design/Build Practice," Convergence and Confluence, 2011 BTES Conference Proceedings - pp. 203-208, 2011. "The Living Wall: A Project of Many," Beginning of/in the End, Sustainable [re]starting - 2011 NCBDS Conference Proceedings - pp. 91-96, 2011.
Academic and Professional Honors	TEX-FAB SKIN International Competition Winner, 2014 Best of Fabrication Award, Architect's Newspaper, 2014 Architecture + Fabrication A+ Award, Architizer Jury Winner, 2014 Architecture + Fabrication A+ Award, Architizer Choice Winner, 2014 Architecture + Materials A+ Award, Architizer Jury Winner, 2014 Gary Day Award, 2012 Lois Gibbs Fellowship, 2012 United University Professions Individual Development Award, 2012 United University Professions Individual Development Award, 2011 ACSA/AIAS New Faculty Teaching Award, 2011
Memberships	AIA, ACSA, ACADIA

Name	David L. Salomon, PhD
Courses Taught	ARC 231-531 Arch History 1 ARC234-534 Arch History 2
Education	PhD Architecture, 2004; University of California at Los Angeles M.Arch, 1994; University of Wisconsin BS Finance, 1989; Rutgers College
Teaching Experience	Ithaca College, Architectural Studies Program, 2013-present University at Buffalo, Dept. of Architecture, 2012 – 2013 Cornell University, Dept. of Architecture, August, 2004 – 2011 University of Pennsylvania, Dept. of Architecture, 2010, 2013-2014 Syracuse University, School of Architecture, Syracuse, NY, 2009 – 2010 Pratt Institute, School of Architecture, Brooklyn, NY, 2001 – 2001
Professional Experience	
Registration	
Publications	<p><i>The Architecture of Patterns</i>, co-authored with Paul Andersen; by Sanford Kwinter; graphic design by David Carson (New York: Norton, forthcoming August, 2010).</p> <p>"The Highway Not Taken: Tony Smith and the Suburban Sublime," <i>Places</i>, http://places.designobserver.com/feature/tony-smith-new-jersey-turnpike/38084/; originally posted on September 19, 2013.</p> <p>Fluorescent Architecture, or Dan Flavin at the Supermarket," <i>The Journal of Architecture</i>, forthcoming, 2014</p> <p>"Experimental Cultures: On the 'End' of the Design Thesis and the Rise of Research Studio," <i>Journal of Architectural Education</i> 65 (November, 2011)</p> <p>"Taste is Critical," <i>Cornell Journal of Architecture</i> 8 (January, 2011)</p> <p>"One Thing or Another," <i>Grey Room</i> #7 (Summer 2002)</p> <p>"Suburban Sensibilities," <i>ACSA Annual Meeting</i>, San Francisco, CA, March 2013</p> <p>"A Brief History of the American Driveway," <i>Society for American City and Regional Planning History Annual Conference</i>, Baltimore, MD, October, 2011</p> <p>"Modernist Parking Space," <i>Society of Architectural Historians Annual Meeting</i>, New Orleans, April, 2011.</p>
Academic and Professional Honors	
Memberships	

Name	Mark Shepard
Courses Taught	ARC 606/608 - Upper Level Graduate Design Studio ARC 598 - Design Research Seminar
Education	MFA in Combined Media, CUNY, Hunter College, 1998 MS in Advanced Architectural Design, Columbia University, 1996 BArch, Cornell University, 1992
Teaching Experience	<i>University at Buffalo:</i> Associate Professor, 2011 Assistant Professor, 2005 to 2011 Co-Director, Center For Virtual Architecture Coordinator, Media | Architecture | Computing March+MFA Dual Degree Program Researcher, Situated Technologies Research Group <i>University Of The Arts, Philadelphia, PA:</i> Senior Lecturer, College Of Art And Design, 2003 – 2005 <i>Purchase College, SUNY:</i> Lecturer, School Of Art and Design, 2003 – 2005 <i>Cornell University:</i>
Professional Experience	
Registration	
Publications	Shepard, Mark; Offenhuber, Dietmar and Schechtner, Katja. "Surviving the Sentient City", <i>Inscribing a Square: Urban Data as Public Space</i> . eds. Offenhuber, D. and Schechtner, K. Vienna: Springer, 2012. Shepard, Mark (ed). <i>Toward the Sentient City: ubiquitous computing, architecture and the future of urban space</i> . New York: The Architectural League of New York and Cambridge: MIT Press, 2011. Shepard, Mark. "Toward the Sentient City", in <i>Sentient City: ubiquitous computing, architecture and the future of urban space</i> . ed. Shepard, M. New York: The Architectural League of New York and Cambridge: MIT Press, 2011. <i>Situated Technologies Pamphlet Series</i> , co-edited with Omar Khan and Trebor Scholz, The Architectural League of New York, 2007–2011. Shepard, Mark. "Near future urban archaeology: The Sentient City Survival Kit", Open: Cahier on Art and the Public Domain, v19. NAI Publishers. May 2010. Shepard, Mark. "Extreme Informatics: Toward the De-saturated City", Handbook of Research on Urban Informatics: The Practice and Promise of the Real-Time City, ed. Foth, M. Hershey, PA: Information Science Reference, IGI Global, 2008. Schipper, Vincent. "The Common Sense", Volume - The Internet of Things, issue 28, June 2011.
Academic and Professional Honors	SHARE PRIZE, Honorary Mention, 2012 for <i>Sentient City Survival Kit</i> <i>Prix Ars Electronica</i> , Honorary Mention, 2011 <i>Transmediale Award</i> , Nominee, 2011 <i>Eyebeam Fellowship</i> , Eyebeam Art And Technology Center, New York, NY, 2011 <i>New York State Council On The Arts</i> , Individual Artist Grant, Electronic Media and Film, 2009 <i>Creative Capital</i> , Artist Grant – Emerging Fields, Project Grant, 2009. <i>Graham Foundation For Advanced Studies In The Fine Arts</i> , Project Grant, 2008 <i>DAAD – German Academic Exchange Service</i> , Group Study Visit, 2007 <i>New York State Council On The Arts</i> , Individual Artist Grant, Architecture, 2003, 2005
Memberships	Exhibitions Committee Member, The Architectural League of New York Scientific Committee Member, MediaCity Project, Bauhaus-Universität Weimar, Germany Curatorial Advisory Board Member, Beall Center for Art and Technology, University of California at Irvine

Name	Robert Shibley
Courses Taught	Buffalo Niagara by Design Graduate Studio Thesis Supervision
Education	MArch Urban Design, Catholic University of America, 1973 BS in Psychology, University of Oregon, 1970 BArch, University of Oregon, 1970
Teaching Experience	<i>University at Buffalo:</i> Dean, School of Arch. and Plng. & Dir, UB Regional Institute (2011 – present) Campus Architect (Senior Advisor to President for Campus Planning and Design) (2006 – present); Professor of Architecture (1982-present) and Professor of Planning (1990-present); Director, The Urban Design Project, (1990-present); Chair, Dept. of Architecture, (1982-89)
Professional Experience	Professional Advisor (1986 – present), <i>The Bruner Foundation</i> , Cambridge, MA Architect and Branch Chief (1980 to 1982), <i>U.S. Department of Energy</i> , Commercial Buildings Branch of the Office of Solar Applications for Buildings, Passive and Hybrid Solar Division, Washington, DC. Project Architect (1971 to 1980), <i>U.S. Army Corps of Engineers</i> , Office of the Chief of Engineers, Washington, DC (1971 to 1980). Partner (1974 to 2011), <i>The Caucus Partnership</i> , Consultants on Environmental and Organizational Change, Buffalo, NY (Formerly CEOC in Blacksburg and Alexandria, VA).
Registration	Licensed Architect, Virginia Certificate #03574, 1974: NCARB, 1974. Certified Planner, American Institute of Certified Planners, Certificate #9685, 1990.
Publications	-Shibley, R. with Axelrod, E., Brooks, B., Farbstein, J. and Wener, R. <i>Partnering Strategies for the Urban Edge</i> , Rudy Bruner Award for Urban Excellence, 180 pages, 2012. -Watson, D., Plattus, A., Shibley, R., Editors, <i>Time Saver Standards for Urban Design</i> , San Francisco CA, McGraw Hill, 2003, 960 pages. -Schneekloth L. and Shibley, R., <i>Placemaking: The Art and Practice of Building Communities</i> , John Wiley & Sons, New York: NY, 1995, 263 pages. -Langdon, P. with Shibley, R. and Welch, P., <i>Urban Excellence</i> , Van Nostrand Reinhold, New York, NY, 1990, 212 pages. -Shibley, R., Guest Editor, <i>Journal of Architectural Education</i> , theme issue on “Architecture and Energy,” Association of Collegiate Schools of Architecture, Washington, DC, Vol. 38, Nos. 1 & 2, 1984, 64 pages.
Academic and Professional Honors	The American Institute of Architects, Thomas Jefferson Award (2014); <i>Elevated to the College of Fellows (FAIA)</i> (2011); New York State AIA Nelson Aldrich Rockefeller Award and Educator of the Year (2013); Western New York AIA Louise Bethune Award for Life Time Achievement (2010); The Upstate New York Chapter of the American Planning Association (2010): <i>Distinguished Leadership - Michael J. Krasner Professional Planner Award</i> ; The University at Buffalo (2010). <i>President’s Medal</i>
Memberships	The American Institute of Architects (AIA); The American Planning Association (1989 to date); The American Institute of Certified Planners (1992 to date); Association of Collegiate Schools of Architecture

Name	Mike Silver
Courses Taught	Fall 2013 – ARC 201 Sophomore Studio Fall 2013 – ARC 485-585 Endless Chairs Spring 2014 – ARC 606 MC Studio Spring 2014 – ARC 404-597 Co-Robotics Fall 2014 – ARC 201 Sophomore Studio Fall 2014 – ARC 593 Metamaterial
Education	M.Arch 1991 Columbia University, New York, NY B.Arch 1987 Pratt Institute, New York, NY
Teaching Experience	2013-Present -Asst. Prof., University of Buffalo, Dept. of Architecture 2010-2012-Design Innovation Fellow, Ball State University 2007-2008-Asst. Professor Cornell University, AAP, Ithaca, NY. 2003-2004-Visiting Professor, GSD Harvard University, Boston, Design Studio Instructor. 2001-2004-Assistant Professor of Architecture and Director of Digital Media, Yale University, School of Architecture, New Haven, CT.
Professional Experience	1995-2006 Mike Silver, Architects - Independent Practice, Brooklyn, NY. 2000-2001 I.M Pei and Partners New York, NY. 1984-1987 Skidmore, Owings and Merrill, New York, NY.
Registration	
Publications	2001-“Many from One” Log Magazine, edited by Cyntia Davidson, Any Corp. York. 2006-Programming Cultures, Edited by Michael Silver, AD Magazine, Wiley/Academy. 2003-Mapping in the Age of Digital Media” edited by Michael Silver, /Academy. 2002-DFC: Robotic Construction Technologies at Yale, Mike Silver, Constructs Magazine, Yale. 1999-“Silver Works” Peggy Deamer, “Reality:? Virtual Reality”, A+U Magazine, Vol. 349.1 1996-Pamphlet Architecture: #19- Reading/Drawing/Building, Princeton Architectural Press. 1988-Form Being and Absence, “The Baptistry of Saint Agnes”, Mike Silver, Pratt Journal of Architecture, Volume. II.
Academic and Professional Honors	2006-Vinoly Research Fellowship, Research into Automated Fiber-Placement technology, NY. 2004-New York State Council on the Arts Grant, Automason Ver 1.0 w/ PDA/Cell Phone, NY. 2004-BSA Research Grant, Boston Society of Architects, Automason Ver. 1.0. 2004-Sanders Fellowship, College of Architecture, University of Michigan, Ann Arbor, MI.

2001-Graham Foundation Grant, Funding for Mapping in the Age of Digital Media.

2000-LeFevre '29 Fellowship, Research in advanced computing, OSU, Columbus, OH.

1998-Grand Prize Nagoya Design Competition, "Drowning Bridge Projects", Nagoya, Japan.

1998-New York Foundation for the Arts, Fellowship, NYFA Grants program, New York, NY.

1996-Young Architects Competition, Architecture League Gallery, New York, NY.

Memberships

Name	Korydon Smith
Courses Taught	ARC 101 – Freshman Studio ARC 502 – Graduate Studio (Year 1) ARC 404 – Elective Seminar: Aesthetics and Social Justice ARC 605/606/608 – Graduate Studios: Inclusive Design ARC 616 – Architectural Research Methods
Education	Ed.D., University of Arkansas, 2010 M.Arch., University at Buffalo, 2001 B.P.S., University at Buffalo, 1999
Teaching Experience	<i>University at Buffalo:</i> Associate Professor, 2012–present; Associate Dean, 2014–present <i>University of Arkansas</i> Associate Professor, 2008–2012; Assistant Professor, 2002–2008
Prof. Experience Registration	
Publications	<p>Books:</p> <p>M. Beth Tauke, Korydon H. Smith, and Charles Davis (Eds.), <i>Diversity and Design: Understanding Hidden Consequences</i> (New York/London: Routledge, 2015).</p> <p>Korydon Smith and Tomà Berlanda, with Peter Rich Architects and the University of Arkansas Community Design Center, <i>Interpreting Kigali, Rwanda: Cultural Inquiries and Architectural Prospects for a Developing African City: Integrating Research, Pedagogy, and Design</i> (Fayetteville, AR: University of Arkansas Press, 2015).</p> <p>Korydon H. Smith (Ed.), <i>Introducing Architectural Theory: Debating a Discipline</i> (New York/London: Routledge, 2012).</p> <p>Wolfgang F.E. Preiser and Korydon H. Smith (Eds.). <i>Universal Design Handbook</i>, 2nd Ed. (New York: McGraw-Hill, 2010).</p> <p>Korydon H. Smith, Jennifer Webb, and Brent T. Williams, <i>Just Below the Line: Disability, Housing, and Equity in the South</i> (Fayetteville, AR: University of Arkansas Press, 2010).</p> <p>Selected Journal Articles since 2011:</p> <p>Korydon Smith and Carl Smith, “Non-Career Teachers in the Design Studio: Economics, Pedagogy, and Teacher Development,” <i>International Journal of Art and Design Education</i>, 31(1), 2012, 90-104.</p> <p>Korydon H. Smith, “Architectural Theory in the Undergraduate Curriculum: A Pedagogical Alternative,” <i>International Journal of Technology and Design Education</i>, (April 2011).</p> <p>Korydon Smith, “Curiositas and Studiositas: Investigating Student Curiosity and the Design Studio,” <i>International Journal of Art and Design Education</i>, 30(2), 2011, 161-175.</p>
Academic and Professional Honors	Gary Day Outstanding Teacher Award (UB, Dept. of Architecture), 2014 Global Awards for Excellence in Urban Design, Congress for New Urbanism, 2013 Residential Architect Design Award, <i>Grand Award</i> , 2013 Collaborative Practice Award, Association of Collegiate Schools of Architecture, 2012/13 Joel Polsky Prize (book award), American Society of Interior Designers, 2011 Ralph O. Mott Outstanding Teacher Award (U. Arkansas), 2005–2008
Memberships	Global Universal Design Commission

Name	Jin Young Song, AIA
Courses Taught	ARC 301 - Junior Studio 1 ARC 302 - Junior Studio 2 ARC 403 - Senior Studio ARC 412 - Media 6 ARC 489/589 - <i>Façade Innovation Seminar</i> ARC 490/590 - <i>Façade As Seminar</i>
Education	Master in Architecture, Harvard University, Cambridge, MA, USA, 2008 B.S in Housing and Interior design, Yonsei University, Seoul, Korea, 2003 B.S in Human Environment Design, Yonsei University, Seoul, Korea, 2003
Teaching Experience	<i>University at Buffalo:</i> Assistant Professor, Department of Architecture, 2013 - current. <i>NYSID(New York School of Interior Design), New York, NY:</i> Part time Lecturer, 2013 <i>Harvard University:</i> Teaching Assistant, 2007
Professional Experience	Principal at DIOINNO Architecture PLLC, Buffalo, NY, 2013- current Skidmore Owings and Merrill LLP, New York, NY, 2008- 2013 Leers Weinzapfel Associates, Boston, MA, 2006-2007 Sauerbruch Hutton Architects, Berlin, Germany, 2006 OMA (Office for Metropolitan Architecture), Rotterdam, Netherlands, 2004
Registration	New York State Architect, #034923 LEED AP
Publications	<i>Slanted Memorial</i> , <u>Bracket issue 4 [Take Action]</u> , 2014 <i>Tensile Tower</i> , <u>EVOLO SKYSCRAPERS 2 - Limited Edition Book</u> , evolo, 2013 <i>P-A-R-T</i> , <u>Hyundai Technology Forum Catalogue</u> , Hyundai E&C, 2013 <i>Tensile City</i> , <u>Sick&Wonder Limited Edition Cityvision Mag – Issue 9</u> , Cityvision Magazine, 2013 <i>Peaceful use of the DMZ for divided families</i> , <u>The Hankyoreh</u> , Hankyoreh, 2013 <i>QUBE</i> , <u>Architizer</u> , <u>Buffalo Rising</u> , <u>Niagara Frontier Publications</u> , 2013 <i>The Towers of Tomorrow</i> , <u>Wall Street Journal</u> , 2012
Academic and Professional Honors	Architizer A+ Awards, Jury Award, 2013 2013 HYUNDAI E&C TECHNOLOGY FORUM Grand Prize, 2013 Unbuilt Visions International Competition, Honorable Mention, 2013 CITYVISION Rio de Janeiro international competition, Honorable Mention, 2013 EvoLo 2011 SKYSCRAPER Competition, Honorable Mention, 2011
Memberships	AIA, ACSA

Name	Hadas Steiner
Courses Taught	<p>Introduction to Architectural History I Introduction to Architectural History II Architectural Theory <i>Habitation</i> to Habitat Nomadology Culture of Objects Dematerialization of the Object The Culture of Space Technology and Space: a history of modern architectural theory</p>
Education	<p>PhD, Massachusetts Institute of Technology, 2001 MA, University of California, Berkeley, 1993 BA, Columbia College, Columbia University in the City of New York, 1991</p>
Teaching Experience	<p><i>University at Buffalo:</i> Associate Professor, 2007-present Assistant Professor, 2000-2007 Associate Member of the Departments of Comparative Literature, History & Visual Studies</p>
Professional Experience	
Registration	
Publications	<p>"After Habitat, Environment," <i>New Geographies</i> 06, fall 2014, pp. 88-97 "The Grain of the Image," <i>Ineffably Urban: Imaging Buffalo</i>, London: Ashgate, 2013, pp. 117-127 "Life at the Threshold," <i>OCTOBER</i> 136, spring 2011, pp. 133-155 "Systems, Objectified," <i>Sentient City</i>, ed. Mark Shepard, Cambridge, MA: MIT Press, 2011, pp. 38-45</p>
Academic and Professional Honors	<p>Humanities Institute Fellow, University at Buffalo, SUNY , 2012 Visiting Fellow, Graduate School of Design, Harvard University, 2011-12 Humanities Institute Fellow, University at Buffalo, SUNY, 2012 Keynote Lecture at an international conference held at the Technion in honor of Leopold Gerstel, June 2011.</p>
Memberships	<p>Association of Collegiate Schools of Architecture Society of Architectural Historians College Art Association American Association of University Women</p>

Name	Edward Steinfeld
Courses Taught	ARC 605 Inclusive Design Group Studio ARC 487, Architecture, Cities and Mass Media ARC 592 Ergonomics and Design
Education	University of Michigan, Doctorate of Architecture, 1972 University of Michigan, Master of Architecture and Certificate in Aging, 1969 Carnegie Mellon University, Bachelor of Architecture, June 1968
Teaching Experience	University at Buffalo: 1978 - Present Distinguished SUNY Professor, Department of Architecture, 2012- Director of the IDEA Center Professor, Department of Architecture, 1982 – 2011 Associate Professor, 1978 - 82 <i>Syracuse University</i> Associate Professor, 1976-78 Assistant Professor, 1973 - 76
Professional Experience	Principal, Edward Steinfeld, Architecture and Design Research, 1978- Since 2009, focus has been on expert witness consultation related to the ADA and Fair Housing, Accessibility.
Registration	Licensed Architect, New York State, 1978
Publications	Steinfeld, E. and Maisel, J. Universal Design: Creating and Inclusive Society,; Wiley, (Spring 2012) Steinfeld, E. and Seelman, Katherine (primary authors). Enabling Environments. World Rehabilitation Report. Geneva: World Health Organization. (2011) D'Souza, C., Paquet, V., Steinfeld, E., & Feathers, D. (2010). Anthropometric visualization tools to improve accessibility of built environments. In: Proceedings of 3rd International Conference on Applied Human Factors and Ergonomics, AHFE International, Miami, Florida, Taylor & Francis, Ltd. 2011. D'Souza, C., Steinfeld, E., Paquet, V., & Feathers, D. Space for wheeled mobility devices in public transportation: an analysis of clear floor space requirements. Transportation Research Record, Journal of the Transportation Research Board, 2010. Steinfeld, E., Paquet, V., Lenker, J., D'souza, C. Maisel, J. Universal design research on boarding and using buses. TRANSED 2010 Conference Proceedings. Hong Kong, June, 2010. Steinfeld, E. Public Transportation. In W. Preiser and K. Smith (eds.). Universal Design Handbook (2nd edition). New York: McGraw Hill, 2010 Steinfeld, E., White, J. Inclusive Housing: A Pattern Book. New York: W.W. Norton, 2010
Academic and Professional Honors	President's Award for Excellence. University at Buffalo. 2010 Distinguished SUNY Professor, 2012
Memberships	American Institute of Architects Congress for the New Urbanism Rehabilitation Engineering Society of North America Factors and Ergonomics Society

Name	Despina Stratigakos
Courses Taught	ARC 231/531 Introduction to Architectural History I ARC 234/534 Architectural History II Gender, Architecture, and Space ARC 488/588 Architecture in Film Museums as Architecture and Cultural Practice
Education	Ph.D. History of Art, Bryn Mawr College, 1999 M.A. History of Art, University of California at Berkeley, 1989 B.A. Cultural Anthropology and History of Art, University of Toronto, 1986
Teaching Experience	<i>University at Buffalo:</i> Associate Professor, 2011-present Assistant Professor, 2007-2011 <i>University of Michigan</i> , Sanders Research Fellow, 2006-07 <i>Harvard University</i> , Lecturer, 2003-07 <i>Illinois State University</i> , Assistant Professor, 2001-03 <i>Grinnell College</i> , Visiting Assistant Professor, 2000-01 <i>University of Iowa</i> , Visiting Assistant Professor, 2000
Prof. Experience Registration	
Publications	Ed., <i>A Cultural History of the Home in the Modern Age</i> (Bloomsbury, forthcoming 2016) <i>Hitler at Home</i> (Yale University Press, forthcoming 2015) <i>A Women's Berlin: Building the Modern City</i> (University of Minnesota Press, 2008) Women Architects: Building Change, <i>Al Jazeera</i> , August 26, 2014 "Unforgetting Women Architects: From Pritzker to Wikipedia," <i>Places</i> , June 3, 2013 "Why Architects Need Feminism," <i>Places</i> , September 12, 2012 "What I Learned From Architect Barbie," <i>Places</i> , June 23, 2011 "The Good Architect and the Bad Parent: On the Formation and Disruption of a Canonical Image," <i>Journal of Architecture</i> 13.3 (2008): 283-296 "I Myself Want to Build: Women, Architectural Education and the Integration of Germany's Technical Colleges," <i>Paedagogica Historica</i> 43.6 (2007): 727-756
Academic and Professional Honors	Book prizes: 2009 DAAD Book Prize of the German Studies Association; 2009 Milka Bliznakov Prize, Virginia Tech Marie Curie Fellow, Ludwig-Maximilians-Universität München, 2012-2014 Faculty Fellow, Humanities Research Center, Rice University (2011) Graham Foundation Individual Research Grant (2010) Research Fellowship, Deutscher Akademischer Austauschdienst (2010) Visiting Scholar, Ludwig-Maximilians-Universität München (2010) Gerda Henkel Foundation (Germany), Research Travel Grant (2009) Fellow, Wolfsonian-Florida International University, Miami (2009) Fellow, Deutscher Akademischer Austauschdienst Interdisciplinary Faculty Seminar in German Studies, University of Chicago (2009) Annual Research Grant, Baldy Center for Law and Social Policy, University at Buffalo, SUNY (2009)
Memberships	Society of Architectural Historians, College Art Association, Historians of German and Central European Art, German Studies Association

Name	Karen JS Tashjian
Courses Taught	ARC 101 Freshman Design Studio ARC 318-518 Architectural Drawing ARC 201 Sophomore Design Studio
Education	B.ARCH, Cornell University, 1981 B.S. in Design, Fine Arts and Architecture, Cornell University, 1977
Teaching Experience	University at Buffalo Assistant Clinical Professor, Dept. of Architecture
Professional Experience	1993 – Present Principal, Karen JS Tashjian, Architect, Springville, NY, 2006-Present Shakespeare in Delaware Park - Collaborated in creating a master plan for performance space in Delaware Park 2013-2014 Summer - Set Designer + Builder, Shakespeare in Delaware Park 2009-2011 ARTIST, Paintings in Oil on canvas, ongoing Residential Reclamation, "bluehouse", Buffalo, NY 2010 – 2011 HOLT Architects, PC, Ithaca, NY 2008 Summer Professor, Monteverde Institute, Monteverde, Costa Rica 2006 Community-Based Sustainable Architectural Design and Living, Experiential, Hands-on. Mentor-Architect role in Studio, directed exercises in Cultural Studies. Deconstruction of the Wilson House, 1870s structure 1998 Urban Design Competition, Providence, R.I. 1986 – 1993 Principal, Middlebury Design Studio, Middlebury, Vt. 1981-1984 Project Designer + Production
Registration	Registered in the State of NY
Publications	Inclusion in book, "Hellstrip Gardening", Evelyn Hadden, 2014 Urban Garden at "bluehouse", Buffalo, NY Book, "Frank Lloyd Wright's Gardeners Cottage at the Martin House Complex", Author and Photographer, 2010 Series of 8 articles, geared to the general public, The Buffalo News, 1999 <i>"You can't afford not to hire an architect."</i> <i>"A home design is not just a set of plans: The design process."</i> <i>"Good architecture is the result of the design process."</i> <i>"The house goes up: The construction phase."</i> <i>"Philosophy of design sets the tone for a project."</i> <i>"Concept: You need one to build on."</i> <i>"Theory: The study of how."</i> <i>"Sustainable building: What is it? Why do I care? How do I benefit?"</i>

Name	Beth Tauke	
Courses Taught	ARC 101 Design Studio 1 ARC 605 Inclusive Design Graduate Research Studio ARC 211 Diversity and Design ARC 591 Color Culture ARC 561 Architecture and Education	
Education	Master of Fine Arts in Design - University of Iowa, 1983 Master of Arts in Design - University of Iowa, 1981 Bachelor of Arts in Psychology, Art, Education - Clarke College, 1978	
Teaching Experience	<i>University at Buffalo:</i> Associate Professor, 1995-present Assistant Professor, 1985-1995 <i>Carnegie Mellon University</i> , Department of Design, Visiting Associate Professor, 1992-93 <i>University of Iowa</i> , Department of Design, Instructor, 1984-85	
Registration		
Publications	<i>Diversity and Design: Understanding the Hidden Consequences</i> (B. Tauke, K Smith and C Davis, eds.) Routledge, 2015 "House of Sense Memory," <i>Lost in Space</i> , Insa Ludtke (ed.), Burkhauser, 2014 "Social Change and Inclusive Wayfinding Strategies," (w. MJ Carroll) <i>Spring SPA Journal: New Dimensions in Research of Environments for Living</i> , 2012 "The Sensory House" (chapter w. D. Schoell) <i>Universal Design Handbook</i> , W. Presier, K. Smith (eds.), McGraw Hill, 2010 "A Declaration of Independence" (foreword) <i>Housing for the Elderly</i> , E. Feddersen, E. & I. Lüdtkke (eds.), 2009 "Universal Design Now" <i>uiGarden</i> , C. Li. (ed.), Apogee, Usability in Asia, 2008 "Studying Difference" <i>ABACUS: Journal on Arch., Conservation & Urban Studies</i> , R. Kare (ed.), 2006 <i>Universal Design Identity Project</i> (public report) National Endowment for the Arts, 2006 "Prosthesis. Space. Aging. Body" <i>Building Material</i> , Journal of the Architectural Association of Ireland, 2003 <i>Universal Design New York</i> (co-editor w. G.S. Danford and chapter author), Mayor's Office, City of New York, 2001 "Universal Designing" (with E. Steinfeld) <i>Teaching Universal Design</i> , J. Christopherson (ed.) The Norwegian State Housing Bank, 2001 <i>Occupational Information</i> (w. M. Lum) Hallwalls Inc., Buffalo, NY, 1999	
Academic and Professional Honors	President Emeritus and Mrs. Meyerson Award for Distinguished Undergraduate Teaching and Mentoring National Endowment for that Arts Universal Design Leadership Grant (PI) 22 nd Conference on Beginning Design Students – Best Paper (1 of 4) National Endowment for that Arts Universal Design Leadership Grant (PI) American Collegiate Schools of Architecture Robert R. Taylor Award 16th Conference on Beginning Design Students – Best Paper (1 of 4) SUNY Chancellor's Award for Excellence in Teaching National Institute for Architectural Education Award - 1st Place Lilly Endowment Teaching Fellowship	2014 2009-present 2006 2004-06 2003 1999 1998 1994 1989
Memberships	Association for the Study of Perception International Colour Association Society for Disability Studies	

Name	Brad Wales, R.A.
Courses Taught	ARC 403 Fall Senior Studio Comprehensive Housing Studio, 1997-2014 ARC 302 Spring Junior Comprehensive Studio, 2012-2014 ARC 448-548 Fall Design-Build Techniques Elective, 2001-2013 Small Built Works Program ARC 404 Senior Practicum, 2010-2014 ARC 607 Ecological Practices Graduate Studio (Solar Decathlon), Fall 2013
Education	B.A. Architecture, Princeton University, Cum Laude 1983
Teaching Experience	<i>University at Buffalo:</i> Adjunct Professor, 1997-2001 Clinical Assistant Professor, 2001 – 2014 <i>Massachusetts College of Art:</i> Artist-in-Residence, Studio for inter-Related Media (SIM), 1986-87
Professional Experience	Sole Practitioner, Commercial, Residential, and Industrial practice, 1994-present Wendel Associates Architects & Engineers, Amherst, NY. 1992-1993 Pratt & Huth Architects & Engineers, Williamsville, NY. 1989-1992 TRM Architects, Buffalo, NY. 1989 Tise-Wilhelm Architects, Brookline, MA. 1984-1988 Perry, Dean, Rogers Architects. Boston, MA. 1983-1984
(related fields)	Nimbus Dance, Buffalo, NY. Founder, co-artistic director, multi-media work, 2006-present Gallery 164, Proprietor and curator for multi-media art gallery, Buffalo, NY. 2003-present Axlegrease, Squeaky Wheel, Buffalo, NY. Produced 30 new TV shows. 1994-96 Straight Line Studio, Boston, MA. Curator for gallery. 1984-1989 Nuncio Flash Theater Company, Inc, Boston, MA. President for 501-C3 troupe. 1985-1987 Films and videos shown in Boston, New York City, Mexico City, and Buffalo. 1984-present
Registrations	New York State current since 1994; New Jersey current since 1997
Publications	Projects published in magazines/journals: "A Downtown Stadium" in Artvoice by Andrew Kulyk for the Vol. 13 No. 32, August 7, 2014. Articles authored: "Small Built Works Project: Energizing the Public Realm in Buffalo" in Journal of Architecture Education (JAE), Jori Erdman, Thomas Leslie (eds), for the "1:1" issue, November 2006. "Big Bang at Big Orbit," critique of installation in the Vol. 11 No. 41, October 12, 2000. "Report from the Front," with historic reconstruction design of F.L. Olmsted's The Front, Vol. 11 No. 1, Spring 1996.
Academic and Professional Honors	National Council of Architecture Registration Boards (NCARB) Grand Prize for the creative integration of education and practice out of 30 entries, with Small Built Works Program. 2005 Burchfield-Penney Art Center Public Art Competition first place out of 46 entries with the Small Built Works Program. 2008
Memberships	Hallwalls, Squeaky Wheel, former Board Member Allentown Association, NFTC Bicycle Subcommittee Chairperson, 1995-1996

Name	Harry L Warren AIA
Courses Taught	ARC 526 Site Planning and Design ARC 403 Senior Design Studio ARC 404 Design Practicum END 450 Senior Environmental Design Studio
Education	BArch, University of Detroit, Architecture, Cum Laude, 1976
Teaching Experience	2009 – present, University at Buffalo, School of Architecture and Planning
Practice Experience	1976- 1992 Harley Ellington Associates Assist Director of Design 1992-1998 RTKL Associates Design Director, Health and Sciences 1998-2009 Cannon Design Design Principal
Professional Honors	National AIA Honor Award National SARA Honor Award 25 State and Local AIA Honor Awards 2 State and Local SARA Honor Awards Aga Kahn Award Nominee
Competitions	2012 Adaptive Reuse of Gates Circle Hospital as a new Veterinary School. 1st Place 2007 Akbank Operations Center, Gebze, Turkey, 1st Place 2007 Utica College, Center for Identity Management and Information Protection, 1st Place 2007 Blue City Beach Apartments, Blue City, Oman, 1st Place 2003 Kuwait Military School, Kuwait City, Kuwait, 1st Place 2001 University Hospital Women's Center, Augusta GA, 1st Place 2000 Sabanci University, Istanbul Turkey, 1st Place 1998 Tel Aviv medical Center, Tel Aviv Israel, 1st Place
Prof. Registration	Michigan and New York
Lectures:	Kean University, 2006 Technology Transfer Conference "The Green Architecture Imperative, Design Collaboration through Technology Transfer" ARE/ Continuing Education Seminars, Cannon Design Academy, 2000-present "Design Process" University of Detroit Mercy, School of Architecture, 2004 "Selected and Current Work" North Carolina State University, School of Architecture and Design, 2003 "Selected and Current Work" Society for College and University Planning 2007 North Atlantic Regional Conference "A Global Perspective: The Best of Both Worlds" 2005 Northeast Regional Conference "Planning the New University" and "Ave Maria University: An Economic Engine"

Publications

2001 Great Lakes Regional Conference "Dancing with Change: Sabanci University"

International Symposium on Earthquake Preparedness, Ankara, Turkey, 2000 "North American Standards of Construction, Sabanci University"

Fred Emery Memorial Conference, 1998, Sabanci University, Istanbul, Turkey "The Future of Universities and Education"

Tradelines, 1993 Healthcare Facilities Conference "Greater Baltimore Medical Center"

Tri-State Hospital Association, 1992 Annual Conference "Patient Unit Design: Responding to Technological Changes and Market Demands"

Paul Ragusa "The Sandra A. and William L. Richter Center, Donor's Pledge Invigorates SBU's Historic Campus" Recreational Sports and Fitness Magazine, March 2005

AIA 2004 Awards Jury "Montante Cultural Center, Canisius College, Buffalo, NY" Architectural Record, June 2004

Larry Flynn "Tradition Reinterpreted, Ancient Ottoman design elements are incorporated into an ultra-modern Turkish university, modeled after the U.S. system of higher education" Building Design & Construction, April 2003

Larry Flynn "Technology and Travel Overcome Time Difference (Istanbul, Turkey)" Building Design & Construction, April 2003

Katie Weeks "A Global Classroom, Combining the cultural history of Turkey with the educational practices of American higher education, Cannon Design creates a cutting-edge campus for Sabanci University" Contract Interiors Magazine, August 2003

"Best Presentation Rooms 2002, Canisius College-Carol and Carl Montante Cultural Center, Buffalo, NY" Presentations Magazine, 2002

M. Kent Turner, James Walsh "Restoring History" American School & University, Nov. 2002

College Planning & Management Magazine, December 2001

Joe Agron (ed.) 'Gold Citation- Auditoriums/ Music Rooms Canisius Montante Cultural Center, Buffalo, NY' American School and University, Aug. 2001

"Best of 2001 Awards- The Carol & Carl Montante Cultural Center at Canisius College" F.W. Dodge New York Construction News, 2001 "...a spectacular project... outstanding and sensitive job in restoring the fabric of the building while blending old and new components."

Ugur Tanyeli 'Sabanci University, the Birth of a Campus' Arredamento Mimarlik, Magazine for Design Culture, October 2000

' William Caudill Citation- Middle School, James Madison School of Excellence, Rochester, NY' American School & University, Architecture Portfolio, November 1999

Timothy Ostler "Sabanci University" World Architecture, Issue No. 56, May 1997

Mark Banholzer, AIA, LEED AP "A Vital Link- Interior features can contribute to better infection control" Health Facilities Management Magazine, November 2005

Robert Volzer, CID, IIDA "Striking a Balance" Nursing Homes Magazine, Feb. 2004

Staff Writer "Our Lady of Peace Skilled Nursing Facility" Design, an annual publication of Nursing Homes Magazine, 2004

Staff Writer "Judge Joseph S. Mattina Community Health Center" New York Construction Review, 2000

Timothy Ostler 'Arison Medical Tower, Tel Aviv Sourasky Medical Center' World Architecture, Issue No. 56, May 1997

Larry Paul Fuller 'Francis Scott Key Medical Pavilion at Johns Hopkins Bayview Campus' World Architecture, Issue No. 42, January 1996

E.L. Nesmith 'Designs for the Future' Healthcare Architecture, 1994

Laurin McCracken (ed.) 'Greater Baltimore Medical Center, Obstetrics/ Acute Care Expansion' Process Architecture, July 1993, n. 111

Margaret Gaskie 'Patients First' Architecture, March 1993, v. 82, n. 3, p.99-105

Stanley Abercrombie, AIA "St. Mary's Hospital, Rehabilitation Services Addition, Grand Rapids, Michigan" Interior Design Magazine, November 1985

James O'Brien "Hail Mary, U.S.A., Domino's Pizza founder, Tom Monaghan, has built a town in southern Florida dedicated to hard-core Catholic Living." Gentlemen's Quarterly, July 2007

Susannah Meadows "Halfway to Heaven- A Catholic millionaire's dream town draws fire" Newsweek, February 2006

Barbara A. Nadel, FAIA "Green Building: Essential Design Strategies for a Sustainable Future" Architectural Record, November 2006

Beth O'Neill -Red "Domino's Dominion Expands, In Florida, pizza magnate builds communion community" Landscape Architecture, September 2006

Barry A. Muskat "Up with the New, Recent and Current Projects- Downtown Dynamics on Elm Street" Buffalo Spree, July-August 2006

Karrie Jacobs "The Virgin Mary is in the Details" Metropolis, June 2006

Staff Writer

"Best of 2001- Buffalo Niagara International Airport Concourse Addition" F.W. Dodge New York Construction News, 2001

Jennifer Brannock "In the beginning- A university town, high expectations, state-of-the-art technology and wanting to be a "normal Catholic University" Naples News Daily, 8/20/07

Marci Elliot "Ave Maria- the first Catholic university to be built in the United States in 40 years"

Naples News Daily, 2/19/03 Tamar Lewin "A Catholic College, a Billionaire's Ideal, Will Rise in Florida"

The New York Times, 2/10/03 James Fink "Renovated Church Captures Design Award"

Business First of Buffalo, 1/25/02 Douglas Frantz "Private Money Enlivens University Education in Turkey"

The New York Times, 3/12/01 Tom Buckham "New Concert Hall Debuts Tonight at Canisius College"

The Buffalo News, 10/23/00 James P. McCoy "New Life for an Old Church" The Buffalo News, 12/3/99 Michael Beebe "The Sacred Soaring Churches that once anchored Buffalo's Neighborhoods are Falling Victim to Changing Times. First stripped of their valuables, many are being demolished, but it doesn't have to be that way."

The Buffalo News, 3/7/99 Karen Brady "Local Campuses Taking on a Fresh Look"

The Buffalo News, 1/31/99 Mary Beth Marklein "Birth of a clean town: Ave Maria"

USA Today, 7/18/07 Sharon Linstedt "Planning Board unanimously approves concept for tallest building"

The Buffalo News, 1/17/07 Sharon Linstedt "Tallest City Building Proposed"

The Buffalo News, 10/25/06 Richard Huntington "What Makes a Building Beautiful, our critics aesthetic rating of some of Western New York's most notable buildings"

The Buffalo News, 5/7/06 "Erie County Public Services Building- the cool hand of modernism warmed up by a bit of well-turned intellectual wit"

News Staff "Public Safety Campus is a Cause for Celebration"

The Buffalo News, 11/22/04 Mark Sommer "Building Plans Puts Security Foremost"

Design Solutions Magazine, "Ave Maria University Oratory" 2011

Name	Sue Weidemann
Courses Taught	ARC 593 Methods of Gathering Info ARC 564 Social Behavior and Space
Education	B.S., M.S. & Ph. D., Psychology , University of Illinois-Urbana/Champaign
Teaching Experience	<i>University at Buffalo:</i> Visiting Professor, 2012 – Present Senior Consultant IDEA Access 2011- Present <i>University of Illinois:</i> Professor. Architecture, Landscape, Urban & Regional Planning 1975 – 1994 Senior Research Director, First Pic 2004-2007 Independent Research Analyst, Jacobs Facilities 2006 Research Director, State of Missouri Research Consultant, Wachs, Leggett & Platt 2007-2008, 2012
Professional Experience	BOSTI Associates, President and Director of Research 2002 - Ongoing
Registration	
Publications	"Human Performance Implications of Green Design", Co-Author. White paper developed for World Trade Center Properties, NYC. New analyses and updated literature review – 2013.
Academic and Professional Honors	
Memberships	

Name	Michael Williams
Courses Taught	ARC 201 – Sophomore Studio ARC 311 – Sophomore Media ARC 404 – Senior Studio ARC 512 – Graduate Media, Year 1 ARC 607 – Graduate Studio
Education	M.Arch, RISD, 2007 B.S.Arch, Ohio State University, 1998
Teaching Experience	<i>University at Buffalo:</i> Adjunct Professor, 2011 - 2014
Professional Experience	HW Studio Architecture, Buffalo, NY, 2013 - Current Cannon Design, Buffalo, NY, 2008- 2011 Tigerman McCurry, Chicago, IL, 2007-2008 3six0, Providence, RI, 2006 URS, Columbus & Washington D.C. 1998-2004
Registration	
Publications	
Academic and Professional Honors	
Memberships	

Name	Michael Zebrowski
Courses Taught	ARC 501- Graduate Studio 1
Education	M.Arch, Cranbrook Academy of Art B.Arch, University at Buffalo
Teaching Experience	Adjunct Professor <i>University at Buffalo</i> : Visiting Assistant Professor, Hobart and Williams Smith Colleges Adjunct Instructor, Maryland Institute College of Art Assistant Professor, Mississippi State University <i>Clinical Assistant Professor, University at Buffalo</i> Adjunct Instructor, Rochester Institute of Technology
Professional Experience	OPEN and Exhibition and Event Space, Founder and Director This End Up, Design enterprise, Founder and Designer
Publications	<i>Proceedings: "The Cost of Making it"</i> 26th National Conference on the Beginning Design Student <i>Proceedings: "Making Concrete"</i> 26th National Conference on the Beginning Design Student <i>Beginning Design with Suburbia</i> " (co-author Cari Varner) 25th National Conference on the Beginning Design Student <i>Proceedings: "Wood Shop Acclimation Project"</i> 24th National Conference on the Beginning Design Student <i>Proceedings: "Buffalo Scaled"</i> (co-author Beth Tauke) 24th National Conference on the Beginning Design Student <i>Proceedings: "Elemental House"</i> (co-author Beth Tauke) National Conference on the Beginning Design Student <i>Intersight v 9.06 "Temporal Space"</i> Buffalo School of Architecture and Planning Publication <i>Intersight v 9.06 "Elemental House"</i> SUNY Buffalo School of Architecture and Planning Publication <i>Intersight v 9.06 "Stump"</i> SUNY Buffalo School of Architecture and Planning Publication <i>Intersight v 8.05 "Corners [Snapshot Library]"</i> SUNY Buffalo School of Architecture and Planning Publication Academic and Architectural League Emerging Voices Award, 2014
Professional Honors	US Department of Energy, Mississippi State University, \$175,000 <i>Contemporary Suburbia in Mississippi</i> co-PI with Cari Varner The grant funded an advertising campaign (billboards & magazine advertisements) and the creation of a convention booth for the 2009 Mississippi Home and Products Extravaganza in Jackson, MS. The advertisements and booth directed willing participants to a survey aimed at exploring the increasing presence of contemporary suburbia in the State of Mississippi. 2011 <i>LightBox</i> Nominated by Gabriel Kroiz (Morgan State University) for ACSA Community Practice Award 2011 <i>LightBox</i> Nominated by Gabriel Kroiz (Morgan State University) for ACSA Archive Award, <i>Being Resourceful</i> 2011 Nominated by Dean Dr. MaryAnne Akers (Morgan State University)

for CASE Professor of the Year Award

2010 "The Cost of Making It"

Selected as one of three outstanding papers at the 26th National Conference on the Beginning Design Student, to be presented at ACSA Conference in Montreal, Spring 2010.

2007 "Camera Space"

Selected as one of four outstanding papers at the 22nd National Conference on the Beginning Design Student, was presented at ACSA Conference in Philadelphia, Spring 2007.

2005 Recipient of UUP Individual Development Awards Program

2005 Small Built Works Studio received the 2005 NCARB Grand Prize for creative integration of and education in the academy

4.6. Visiting Team Report (VTR)

**State University of New York at Buffalo
School of Architecture and Planning**

Visiting Team Report

M. Arch

Track I (preprofessional degree plus 64 graduate credit hours)

Track II (undergraduate degree plus 112 graduate credit hours)

The National Architectural Accrediting Board
28 March 2012

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 & Visit Summary

- The 2012 National Architectural Accrediting Board visiting team's review of the State University of New York at Buffalo Master of Architecture program within the School of Architecture and Planning finds a program in transition but with considerable energy and optimism about the future. The administration and faculty have a vision of a school that carries forward the experimental qualities of its foundation. They conceive the School as having a core of professional education that prepares students for contemporary practice. This core is wrapped in the tradition of environmental research. These two layers interact with one another to advance both education and the profession. To this end the architecture program has defined for itself four clear research areas—material culture, inclusive design, sustainable natural and urban environments, and situated technologies.
- During the 2012 visiting team's visit major facilities were under construction, and the team assessed some of the operations of the program housed in temporary buildings. It is noteworthy that despite this relocation the faculty, students, and staff were energized and would not let the temporary inconvenience adversely impact the School's culture.
- The program was prepared for the 2012 visiting team. The dean, chair, faculty, students and staff were helpful and hospitable during our visit. The team wishes to point out that in every instance staff and faculty were responsive and helpful with requests for information. The team draws the program's attention to two items that they may want to consider for future accreditation visits: 1) the team found that the Student Performance Criteria and course matrix did not always indicate the appropriate course that effectively contained evidence of student performance; 2) future team rooms would make assessment easier and more thorough if examples of the student design process in addition to final products were provided. This information would give a team insight into decision-making, alternative explorations, and the critical thinking skills of students.

2. Conditions Not Met

Part I.1.4 Long Range Planning

Part II.1.1 Student Performance Criteria:

B.1 Pre-design

B.6 Comprehensive Design

Part II. 3 Evaluation of Preparatory/Pre-professional Education

3. Causes of Concern

A. Site Design: The visiting team found a lack of diversity in studio site contexts presented as part of design problems. The overwhelming majority of sites were urban in nature with little topographic variety, grading design, parking lot layout, site circulation, or service access.

B. Comprehensive Design: This Student Performance Criteria remains a weak segment in the overall course of study, one that has been mentioned by two previous visiting team reports. The integrative nature of the comprehensive design requirement makes this continuing weakness a particular concern. Refer to II.1.1 for further elaboration.

C. Student Participation in Governance: The visiting team did not find any formal means for the administration to obtain feedback from students on governance and program issues. Students

expressed concern that they do not have an active role to play in areas such as curriculum development, faculty searches, and other important governance issues.

D. Advising: The visiting team heard concerns from students about the adequacy of career advising. Students said career advising was ad hoc in nature and not consistently available to all students. Given the professional aspirations of the program this is a cause of concern for the visiting team. Undergraduate academic advising is currently assigned to one assistant dean. Given the load, this individual is reactive, as opposed to being more proactive, to student needs. This arrangement appears to be a potential impediment to the program and School to meet desired retention, graduation rates, and opportunities for employment.

4. Progress Since the Previous Site Visit (2009)

2004 Condition 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.*

Previous Team Report (2009): The program has a thoroughly organized, structured curriculum that is obviously the result of considerable collaborative effort. However, there does not appear to be communication on other important issues of the program that impact student learning in a reflective and integrated way. The self-assessment procedures do not appear to have a consistent method of implementation.

Individually, a number of faculty expressed to the team their concern about the decision-making process, their lack of involvement in that process and a lack of clear structure for discussions on how the program is fulfilling the mission and accomplishing the NAAB perspectives. A clear and comprehensive process of self-assessment that involves all constituencies is not evident.

2012 Visiting Team Assessment: The issue of decision-making and faculty involvement in the direction of the program and its fulfillment of mission and accomplishing NAAB perspectives is no longer a concern. The faculty at its meeting with the visiting team agreed that the new leadership has brought a sense of "justice and clarity" as well as "democratic processes" to decision-making. Since the last team visit, faculty members have worked hard to develop both formal and informal methods to assess progress and institute curricular change. The Self-Assessment Procedures condition is now met.

2004 Condition 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.*

Previous Team Report (2009): The exact wording of the required NAAB text was not found in the catalogue.

2012 Visiting Team Assessment: The exact wording is found in print and electronic documents. This condition is met.

2004 Condition 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.*

Previous Team Report (2009): Faculty lacks basic support in terms of travel and conferences and research financial support. Research development for all the centers has no centralized support and does not seem to be a priority of the school. The majority of overhead from significant sponsored program income remains with the university and only 12% of that returns to the school. The proposal to split the latter between school, department and principal investigator, while an important first step, remains inadequate.

2012 Visiting Team Assessment: This concern from the previous team is no longer an issue. The architecture program has managed its enrollment and thereby balanced facility, faculty and financial resources. The result of this change in concert with changes in tuition disbursement has improved opportunities for faculty development. Research support has improved through the transfer of the UB Regional Institute to the school. See team report Part I.2.1 and I.2.4 for details.

2004 Condition 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.*

Previous Team Report (2009): The shop and the computer output facilities are superior. The present facilities are not in compliance with ADA and applicable building codes. The 2003 team noted these same concerns. Assurances of immediate action were promised to the 2003 team but did not occur. While some smaller renovations have occurred they have not addressed the serious life safety issues. This team was again assured by the administration that the funding was now in place.

While there is adequate square footage allotted to the program, that space isn't configured appropriately for use as design studios or jury spaces. The freshman studios are too crowded and in another separate and remote building; studio levels are in small rooms; the lecture and seminar spaces have acoustical problems; and the mechanical systems are antiquated and noisy.

2012 Visiting Team Assessment: Given the extent of the construction effort and the pride of both the faculty and administration over this project we do not believe this is a future cause for concern. Progress is being made on the \$50.5 million renovation of Hayes and Crosby Halls. The visiting team reviewed the drawings for the renovation and believes the finished space will be more than adequate for the program and its needs. During the multiyear construction effort the program has made good use of temporary space.

2004 Condition 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.*

Previous Team Report (2009): Current national economy and state budgets concern faculty and students; this is being exacerbated by a perceived lack of transparency regarding the finances of the school and the department. The Compact process of negotiation between the school and the university leads to clear and forward thinking strategies. However there is not transparency in that process for the faculty and students. Only part of this information is reaching the chair, and very little reaches the faculty and students. Clearly discussion within the school on visioning and consequent budgeting would be an effective way of advancing the program.

The department is struggling with chronic underfunding. Since the UB Compact process uses historic funding levels as its starting point, the department remains and apparently will remain underfunded. However, the Compact process does promise the potential of resources based on research initiatives aligned with university priorities. It is not clear that commitments and potential resources are communicated to or understood by the centers or the faculty.

Considering the substantial underfunding, the school has a small target (\$30,000) for development funding.

2012 Visiting Team Assessment: Developed since the previous team visit, the current fiscal plan set in place by the School of Architecture and Planning has resulted in a 28% increase in general per-student dollars within the architecture department, as compared to fiscal resources at the time of the previous visit. Much of this has been accomplished due to a shift to a differential tuition revenue model for the college, complemented by a reduction in the size of the student body, allowing for greater concentration of fiscal resources per student. This issue has therefore been met.

2004 Criterion 13.14, Accessibility: *Ability to design both site and building to accommodate individuals with varying physical abilities*

Previous Team Report (2009): Although written course work shows accessibility knowledge, this information is not synthesized consistently in studio projects.

2012 Visiting Team Assessment: This is no longer a concern. Evidence of this was found for Track I in ARC 302: Design Studio 6: Models, Organizations + Environments and ARC 362: Architectural Programming. Evidence of this condition as being met in Track II was found in ARC 503: Architectural Design Studio 3: Integration of Technology and ARC 562: Architectural Programming.

2004 Criterion 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*

Previous Team Report (2009): Although portions of this criterion are introduced early in the program in ARC 302, many of these elements are not integrated consistently by the completion of the required studio sequence. In the coursework provided in the team room, the level presented

did not demonstrate an understanding of structural and environmental systems. Comprehensive life safety provision was not presented consistently.

The studio work in the fourth year comprehensive design studio introduced many new issues to students such as high-rise construction, urban mixed use, and housing. Integrating this new knowledge appears to have limited the time for development of a comprehensive project.

2012 Visiting Team Assessment: This remains unmet. See II.1.1, B.6.

FINAL DRAFT

II. Compliance with the Conditions for Accreditation

Part One (I): INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT

Part One (I): Section 1. Identity and Self-Assessment

I.1.1 History and Mission: *The program must describe its history, mission and culture and how that history, mission, and culture is expressed in contemporary context. Programs that exist within a larger educational institution must also describe the history and mission of the institution and how that history, mission, and culture is expressed in contemporary context.*

The accredited degree program must describe and then provide evidence of the relationship between the program, the administrative unit that supports it (e.g., school or college) and the institution. This includes an explanation of the program's benefits to the institutional setting, how the institution benefits from the program, any unique synergies, events, or activities occurring as a result, etc.

Finally, the program must describe and then demonstrate how the course of study and learning experiences encourage the holistic, practical and liberal arts-based education of architects.

[X] The program has fulfilled this requirement for narrative and evidence

2012 Team Assessment: The 2011 Architecture Program Report provides a description of the history and mission of the institution. It outlines the eight cross-disciplinary areas of strength that define the university's strategic initiative UB 2020. The architecture program and the School contribute to four of these areas—artistic expression and the performing arts, civic engagement and public policy, information and computing technologies, and health and wellness across the life span. Each strategic emphasis finds expression in the program's graduate research groups—inclusive design, material culture, situated technologies, and sustainable urban and natural environments—and the relationship strengthens the tie between the larger institution and the program.

The State University of New York at Buffalo has a comprehensive general education curriculum that is incorporated into each major and degree program. The architecture program's undergraduate curriculum complies with this requirement. In addition, the architecture department provides courses that contribute to the university's broad educational requirement.

I.1.2 Learning Culture and Social Equity:

- *Learning Culture: The program must demonstrate that it provides a positive and respectful learning environment that encourages the fundamental values of optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments both traditional and non-traditional.*

Further, the program must demonstrate that it encourages students and faculty to appreciate these values as guiding principles of professional conduct throughout their careers, and it addresses health-related issues, such as time management.

Finally, the program must document, through narrative and artifacts, its efforts to ensure that all members of the learning community: faculty, staff, and students are aware of these objectives and are advised as to the expectations for ensuring they are met in all elements of the learning culture.

- *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 a culturally rich educational environment in which each person is equitably able*

to learn, teach, and work. This includes provisions for students with mobility or learning disabilities. The program 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. Finally, the program must demonstrate that it has a plan in place to maintain or increase the diversity of its faculty, staff, and students when compared with diversity of the institution during the term of the next two accreditation cycles.

[X] The program has demonstrated that it provides a positive and respectful learning environment.

[X] The program has demonstrated that it provides a culturally rich environment in which each person is equitably able to learn, teach, and work.

2012 Team Assessment: The team found the learning culture to be positive at all levels throughout the program. The Academic/Studio Culture Policy is online, and students indicated they are aware of the policy. The university has an Academic Integrity policy that is described on the program's website (http://www.ap.buffalo.edu/architecture/overview/pol_standards.asp).

Staff members were enthusiastic about the School and program and all felt they were contributing to the program's desire for excellence.

In the student and faculty meetings there was an expression of pride and support for diversity in the program. Students noted the international diversity of the faculty and the diversity of the student body. The program is aware of the special efforts required to encourage and support a diverse culture. They have initiated the founding of a NOMA chapter, started a women's group for faculty and students, and worked to create supportive relationships among the student body.

1.1.3 Response to the Five Perspectives: Programs must demonstrate through narrative and artifacts, how they respond to the following perspectives on architecture education. Each program is expected to address these perspectives consistently within the context of its history, mission, and culture and to further identify as part of its long-range planning activities how these perspectives will continue to be addressed in the future.

- A. Architectural Education and the Academic Community.** That the faculty, staff, and students in the accredited degree program make unique contributions to the institution in the areas of scholarship, community engagement, service, and teaching.¹ In addition, the program must describe its commitment to the holistic, practical and liberal arts-based education of architects and to providing opportunities for all members of the learning community to engage in the development of new knowledge.

[X] The program is responsive to this perspective.

2012 Team Assessment: The university is fully accredited by the Middle States Association of Colleges and Secondary Schools and is in good standing. The architecture program website and interviews of faculty affirm that the program has built bridges with other disciplines within the university and enjoys joint degree programs with the Department of Media Study (March/MFA), the School of Management (MARCH/MBA), and the Department of Urban and Regional Planning (March/MUP). The faculty of the program have also worked with or shared courses with the Department of Urban and Regional Planning, the Department of Visual Studies, the Department of Industrial Engineering, the Department of Rehabilitation Services, and the Law School. A few faculty hold joint appointments with other departments. The faculty also participates in the thesis

¹ See Boyer, Ernest L. *Scholarship Reconsidered: Priorities of the Professoriate*. Carnegie Foundation for the Advancement of Teaching. 1990.

committees for other disciplines, which further integrates the School's faculty into the intellectual life of the university.

- B. Architectural Education and Students.** That students enrolled in the accredited degree program are prepared: to live and work in a global world where diversity, distinctiveness, self-worth, and dignity are nurtured and respected; to emerge as leaders in the academic setting and the profession; to understand the breadth of professional opportunities; to make thoughtful, deliberate, informed choices and; to develop the habit of lifelong learning.

[X] The program is responsive to this perspective.

2012 Team Assessment: The students in the M. Arch program at the State University of New York at Buffalo receive an education with an emphasis on research and its application to architecture practice. Students enter the workforce understanding the value of working in cooperative groups and demonstrate the ability to do so by the abundance of collaborative projects by groups of students under the tutelage of faculty.

Through organizations such as the American Institute of Architecture Students, the Graduate Student Association, and Alpha Rho Chi, students are actively serving as leaders in their school and local community and are participating at conferences. There are several recent examples of students participating in national and international competitions, and winning recognition for their effort. This activity affirms their abilities match those of their peers and professionals alike.

- C. Architectural Education and the Regulatory Environment.** That students enrolled in the accredited degree program are provided with: a sound preparation for the transition to internship and licensure within the context of international, national, and state regulatory environments; an understanding of the role of the registration board for the jurisdiction in which it is located, and; prior to the earliest point of eligibility, the information needed to enroll in the Intern Development Program (IDP).

[X] The program is responsive to this perspective.

2012 Team Assessment: The team found the program is responsive to this perspective. Students learn the role of regulatory issues in ARC: 482 & ARC: 582 Professional Practice, and through licensed professionals on the faculty. Students are knowledgeable of IDP and have access to IDP materials and the IDP coordinator. At the student meeting 80% of the students were aware of the procedure and process to IDP, and when queried by the visiting team, answered questions about the program and were knowledgeable about it.

- D. Architectural Education and the Profession.** That students enrolled in the accredited degree program are prepared: to practice in a global economy; to recognize the impact of design on the environment; to understand the diverse and collaborative roles assumed by architects in practice; to understand the diverse and collaborative roles and responsibilities of related disciplines; to respect client expectations; to advocate for design-based solutions that respond to the multiple needs of a diversity of clients and diverse populations, as well as the needs of communities and; to contribute to the growth and development of the profession.

[X] The program is responsive to this perspective.

2012 Team Assessment: A number of programs and initiatives within the studio curricula of both Tracks I and II prepare the students for diverse clients and diverse user types, as well as the range of roles and responsibilities they will face upon entering the profession. Students interact with a wide range of socio-cultural user groups in their studio courses that engage local

communities, and they learn about the profession and its response to diverse client groups in history lectures and topical courses.

- E. Architectural Education and the Public Good.** That students enrolled in the accredited degree program are prepared: to be active, engaged citizens; to be responsive to the needs of a changing world; to acquire the knowledge needed to address pressing environmental, social, and economic challenges through design, conservation and responsible professional practice; to understand the ethical implications of their decisions; to reconcile differences between the architect's obligation to his/her client and the public; and to nurture a climate of civic engagement, including a commitment to professional and public service and leadership.

[X] The program is responsive to this perspective.

2012 Team Assessment: The school has a tradition of working with communities in the Buffalo region. Students are frequently involved in studio projects and volunteer activities that require civic engagement as a central component of their course work. Both Track I and II studio projects involve students in projects with clients and end users where their design proposals address varied socio-economic concerns and/or environmental justice issues.

The environment in the program is supportive of extracurricular involvement in student organizations, collaborative events with the AIA, and other community volunteering and leadership opportunities such as participation in Habitat for Humanity. This activity contributes to students gaining an appreciation of the ethical dimension of architecture and its need to serve both clients and the public.

I.1.4 Long-Range Planning: *An accredited degree program must demonstrate that it has identified multi-year objectives for continuous improvement within the context of its mission and culture, the mission and culture of the institution, and, where appropriate, the five perspectives. In addition, the program must demonstrate that data is collected routinely and from multiple sources to inform its future planning and strategic decision making.*

[X] The program's processes do not meet the standards as set by the NAAB.

2012 Team Assessment: The APR did not provide a description of a long-range plan or the process the program has defined to develop a plan. There was no long-range planning document available in the team room for review.

The program did provide the visiting team with in-depth information about its current data gathering and information development program (see I.1.5) and how it utilizes this data to shape changes in learning objectives and course work (faculty meeting minutes dated Thursday, 19 May 2011). Faculty and staff did acknowledge in meetings and discussions that the data collection program is in its infancy (only a single year's data had been collected at the time of the visit) and is premature to determine trends. The new Dean has held a retreat with the faculty and has discussed future direction, but no long-range planning document was available in the team room.

I.1.5 Self-Assessment Procedures: *The program must demonstrate that it regularly assesses the following:*

- *How the program is progressing towards its mission.*
- *Progress against its defined multi-year objectives (see above) since the objectives were identified and since the last visit.*
- *Strengths, challenges and opportunities faced by the program while developing learning opportunities in support of its mission and culture, the mission and culture of the institution, and the five perspectives.*
- *Self-assessment procedures shall include, but are not limited to:*
 - *Solicitation of faculty, students', and graduates' views on the teaching, learning and achievement opportunities provided by the curriculum.*
 - *Individual course evaluations.*
 - *Review and assessment of the focus and pedagogy of the program.*
 - *Institutional self-assessment, as determined by the institution.*

The program must also demonstrate that results of self-assessments are regularly used to advise and encourage changes and adjustments to promote student success as well as the continued maturation and development of the program.

[X] The program's processes meet the standards as set by the NAAB.

2012 Team Assessment: The 2012 visiting team confirmed the self-assessment processes outlined in the APR through faculty meetings and interviews. The program has a formal survey tool that is used to solicit input from students, faculty, alumni and practitioners. Faculty meetings (an example of formal data collection was found in faculty meeting minutes dated Thursday, 19 May 2011) and discussions among studio instructors augment the information compiled from the survey. The combination of surveys and faculty discussions focused on student outcomes in coursework add richness to the information available to guide curricular improvement.

PART ONE (I): SECTION 2 – RESOURCES**I.2.1 Human Resources & Human Resource Development:**

- **Faculty & Staff:**
 - *An accredited degree program must have appropriate human resources to support student learning and achievement. This includes full and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff. Programs are required to document personnel policies which may include but are not limited to faculty and staff position descriptions².*
 - *Accredited programs must document the policies they have in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA) and other diversity initiatives.*
 - *An accredited degree program must demonstrate that it balances the workloads of all faculty and staff to support a tutorial exchange between the student and teacher that promotes student achievement.*
 - *An accredited degree program must demonstrate that an IDP Education Coordinator has been appointed within each accredited degree program, trained in the issues of IDP, and has regular communication with students and is fulfilling the requirements as outlined in the IDP Education Coordinator position description and regularly attends IDP Coordinator training and development programs.*
 - *An accredited degree program must demonstrate it is able to provide opportunities for all faculty and staff to pursue professional development that contributes to program improvement.*
 - *Accredited programs must document the criteria used for determining rank, reappointment, tenure and promotion as well as eligibility requirements for professional development resources.*

[X] Human Resources (Faculty & Staff) are adequate for the program

2012 Team Assessment: The team found evidence of these resources in the APR, pages 26-37, promotion policies dated Feb 1987, EEO/AA materials from UB website, and verified through discussions with faculty. The team noted the faculty mentorship policies to be helpful, encouraging and egalitarian.

- **Students:**
 - *An accredited program must document its student admissions policies and procedures. This documentation may include, but is not limited to application forms and instructions, admissions requirements, admissions decisions procedures, financial aid and scholarships procedures, and student diversity initiatives. These procedures should include first-time freshman, as well as transfers within and outside of the university.*
 - *An accredited degree program must demonstrate its commitment to student achievement both inside and outside the classroom through individual and collective learning opportunities.*

[X] Human Resources (Students) are adequate for the program

2012 Team Assessment: The team found evidence of admission policies on the department website (<http://www.ap.buffalo.edu/architecture/admissions/>), and the program provides opportunities for students to engage in foreign study, volunteer with local non-profits, and participate in collective research projects.

I.2.2 Administrative Structure & Governance:

- **Administrative Structure:** An accredited degree program must demonstrate it has a measure of administrative autonomy that is sufficient to affirm the program's ability to conform to the conditions

² A list of the policies and other documents to be made available in the team room during an accreditation visit is in Appendix 3.

for accreditation. Accredited programs are required to maintain an organizational chart describing the administrative structure of the program and position descriptions describing the responsibilities of the administrative staff.

[X] Administrative Structure is adequate for the program

2012 Team Assessment: The architecture program is one of two programs in the School of Architecture and Planning. It is led by a chair who reports directly to the Dean of the School. The chair participates in the school-wide Dean's Council. The chair of the architecture program administers the architecture degree program and is supported by both Associate and Assistant Deans responsible for financial information, IT, academic affairs, undergraduate education and graduate education. The structure is adequate.

- **Governance:** The program must demonstrate that all faculty, staff, and students have equitable opportunities to participate in program and institutional governance.

[X] Governance opportunities are adequate for the program

2012 Team Assessment: In meetings with the faculty and staff, the visiting team heard that a system of committees and scheduled meetings exist for personnel to participate in the governance process. Meetings with students also affirmed the existence of an open and collegial atmosphere for students to participate in program governance, particularly through the AIAS and Alpha Rho Chi chapters, though this process is at present an informal one.

The visiting team did not find evidence of a formal governance document (bylaws) that makes the governance process transparent with clearly defined roles and responsibilities for each constituent.

I.2.3 Physical Resources: *The program must demonstrate that it provides physical resources that promote student learning and achievement in a professional degree program in architecture. This includes, but is not limited to the following:*

- *Space to support and encourage studio-based learning*
- *Space to support and encourage didactic and interactive learning.*
- *Space to support and encourage the full range of faculty roles and responsibilities including preparation for teaching, research, mentoring, and student advising.*

[X] Physical Resources are adequate for the program

2012 Team Assessment: The university approved a \$50.1M upgrade to the School of Architecture and Planning facilities. The first phase, \$20M renovation of Hayes Hall, was underway during the visit. Students, faculty and staff displaced by the construction were in the Hayes Annexes, Diefendorf Hall and the Health Sciences Library. Once the renovation of Hayes Hall has been completed, Crosby Hall is scheduled for renovation, and students will be relocated to the vacated flex space.

To address the overcrowding mentioned by the previous team, the school has placed a limit on the enrollment for freshman studios housed in Parker Hall. The school's Materials and Methods Shop for wood, metal and plastics is also located in Parker Hall, and is both spacious and well-equipped.

I.2.4 Financial Resources: *An accredited degree program must demonstrate that it has access to appropriate institutional and financial resources to support student learning and achievement.*

[X] Financial Resources are adequate for the program

2012 Team Assessment: Despite fiscal hardships caused by current national economic conditions and state funding shortfalls, the fiscal plan set in place by the Dean of the School of Architecture and Planning has resulted in a 28% increase in general per-student dollars in the Architecture Department since the previous accreditation visit. Much of this has been accomplished due to a shift to a differential tuition revenue model for the college, as well as a reduction in the size of the student body for the architecture department, which has allowed a greater concentration of revenues to a conversely smaller student body. The 2011 differential tuition model has proven successful, with expectation of another 3% improvement in per-student funding over the next two years. Other promising signs include a significant projected increase in scholarship funding above base existing endowments, which are expected to result in an 83% increase in annual funding as compared to current values over the next two years.

This change in policy and process essentially ends the "Compact Process," which was noted in the previous VTR as being an underlying cause to ongoing chronic shortfalls in departmental funding.

To complement the department's already strong commitment to research, the architecture department has committed up to \$2,500 annually to non-tenured faculty for use in architectural research activities to serve as incubators for future departmental research growth above and beyond existing activities.

1.2.5 Information Resources: *The accredited program must demonstrate that all students, faculty, and staff have convenient access to literature, information, visual, and digital resources that support professional education in the field of architecture.*

Further, the accredited program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resources professionals who provide information services that teach and develop research and evaluative skills, and critical thinking skills necessary for professional practice and lifelong learning.

[X] Information Resources are adequate for the program

2012 Team Assessment: The team found this condition met. Resources for students and faculty in both digital and hard copy form are readily accessible. The renovation of Hayes Hall has resulted in the temporary relocation of a portion of the library to the Health Science Library, which is very close to Crosby Hall and temporary faculty offices. The remaining portion of the collection is available through a patron request system. Students and faculty expressed satisfaction that materials are available. Once the renovation of Hayes Hall is complete, all volumes will return to a central location within the renovated building.

PART I: SECTION 3 –REPORTS

I.3.1 Statistical Reports³. *Programs are required to provide statistical data in support of activities and policies that support social equity in the professional degree and program as well as other data points that demonstrate student success and faculty development.*

- *Program student characteristics.*
 - *Demographics (race/ethnicity & gender) of all students enrolled in the accredited degree program(s).*
 - *Demographics compared to those recorded at the time of the previous visit.*
 - *Demographics compared to those of the student population for the institution overall.*
 - *Qualifications of students admitted in the fiscal year prior to the visit.*
 - *Qualifications of students admitted in the fiscal year prior to the upcoming visit compared to those admitted in the fiscal year prior to the last visit.*
 - *Time to graduation.*
 - *Percentage of matriculating students who complete the accredited degree program within the “normal time to completion” for each academic year since the previous visit.*
 - *Percentage that complete the accredited degree program within 150% of the normal time to completion for each academic year since the previous visit.*
- *Program faculty characteristics*
 - *Demographics (race/ethnicity & gender) for all full-time instructional faculty.*
 - *Demographics compared to those recorded at the time of the previous visit.*
 - *Demographics compared to those of the full-time instructional faculty at the institution overall.*
 - *Number of faculty promoted each year since last visit.*
 - *Compare to number of faculty promoted each year across the institution during the same period.*
 - *Number of faculty receiving tenure each year since last visit.*
 - *Compare to number of faculty receiving tenure at the institution during the same period.*
 - *Number of faculty maintaining licenses from U.S. jurisdictions each year since the last visit, and where they are licensed.*

[X] Statistical reports were provided and provide the appropriate information

2012 Team Assessment: Statistical reports were provided in the APR and documents submitted by the Assistant Dean for Undergraduate Education. These sources provide the information required in Section I.3.1 of the 2009 Conditions.

I.3.2. Annual Reports: *The program is required to submit annual reports in the format required by Section 10 of the 2009 NAAB Procedures. Beginning in 2008, these reports are submitted electronically to the NAAB. Beginning in the fall of 2010, the NAAB will provide to the visiting team all annual reports submitted since 2008. The NAAB will also provide the NAAB Responses to the annual reports.*

The program must certify that all statistical data it submits to NAAB has been verified by the institution and is consistent with institutional reports to national and regional agencies, including the Integrated Postsecondary Education Data System of the National Center for Education Statistics.

The program is required to provide all annual reports, including statistics and narratives that were submitted prior to 2008. The program is also required to provide all NAAB Responses to annual reports

³ In all cases, these statistics should be reported in the same format as they are reported in the Annual Report Submission system.

transmitted prior to 2008. In the event a program underwent a Focused Evaluation, the Focused Evaluation Program Report and Focused Evaluation Team Report, including appendices and addenda should also be included.

[X] Annual Reports and NAAB Responses were provided and provide the appropriate information

2012 Team Assessment: Annual reports and NAAB Responses were provided in the team room and contained the appropriate information.

I.3.3 Faculty Credentials: *The program must demonstrate that the instructional faculty are adequately prepared to provide an architecture education within the mission, history and context of the institution.*

In addition, the program must provide evidence through a faculty exhibit⁴ that the faculty, taken as a whole, reflects the range of knowledge and experience necessary to promote student achievement as described in Part Two. This exhibit should include highlights of faculty professional development and achievement since the last accreditation visit.

[X] Faculty credentials were provided and demonstrate the range of knowledge and experience necessary to promote student achievement.

2012 Team Assessment: The team found the faculty credentials satisfactory, with a range of experience and expertise in all subject matter. Approximately 40% of the current design studio faculty members are registered architects.

⁴ The faculty exhibit should be set up near or in the team room. To the extent the exhibit is incorporated into the team room, it should not be presented in a manner that interferes with the team's ability to view and evaluate student work.

PART ONE (I): SECTION 4 – POLICY REVIEW

The information required in the three sections described above is to be addressed in the APR. In addition, the program shall provide a number of documents for review by the visiting team. Rather than be appended to the APR, they are to be provided in the team room during the visit. The list is available in Appendix 3.

[X] The policy documents in the team room met the requirements of Appendix 3

2012 Team Assessment: The team found the materials readily available and included in Appendix 3.

FINAL DRAFT

PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM

II.1.1 Student Performance Criteria: The SPC are organized into realms to more easily understand the relationships between individual criteria.

Realm A: Critical Thinking and Representation:

Architects must have the ability to build abstract relationships and understand the impact of ideas based on research and analysis of multiple theoretical, social, political, economic, cultural and environmental contexts. This ability includes facility with the wider range of media used to think about architecture including writing, investigative skills, speaking, drawing and model making. Students' learning aspirations include:

- Being broadly educated.
- Valuing lifelong inquisitiveness.
- Communicating graphically in a range of media.
- Recognizing the assessment of evidence.
- Comprehending people, place, and context.
- Recognizing the disparate needs of client, community, and society.

A.1. Communication Skills: *Ability to read, write, speak and listen effectively.*

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in coursework in ARC 231/531: Architectural History 1 & 234/534: Architectural History 2 (both Track I and II), as well as student discussion/observation during studio class tours.

A. 2. Design Thinking Skills: *Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.*

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in ARC 231/531: Architectural History 1 and ARC 234/534: Architectural History 2 for Track I and II.

A. 3. Visual Communication Skills: *Ability to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.*

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in ARC 101: Design Studio 1 Communications and Critical Processes (Track I) and in ARC 511: Architectural Communications 1 and ARC 512 Architectural Communications 2 (Track II). In both degree programs students are introduced to traditional drafting, digital representation, and three-dimensional model making.

A.4. Technical Documentation: *Ability to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.*

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found for Track I in ARC 442: Construction Technology and ARC 404: Technical Documents Practicum, and for Track II in ARC 542: Construction Technology.

A.5. Investigative Skills: *Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.*

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in ARC 231 & 234 (Track 1) and ARC 531 & 534 (Track 2): Architectural History 1 and 2.

A. 6. Fundamental Design Skills: *Ability to effectively use basic architectural and environmental principles in design.*

[X] Met

2012 Team Assessment: This criterion is well met. For Track I evidence was found in ARC 102: Design Studio 2 -- Process + Materiality. For Track II evidence of this ability was found in ARC 501: Architectural Design Studio 1 -- Principles of Design.

A. 7. Use of Precedents: *Ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.*

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in ARC 201: Design Studio 3 -- Integration of History -- Ancient, ARC 202 Design Studio 4 -- Integration of History -- Modern and ARC 403: Design Studio 7 -- Comprehensive Project for Track I students. Evidence of compliance for Track II students was found in ARC 502: Architectural Design Studio 2 -- Integration of History and ARC 504: Architectural Design Studio 4 -- Comprehensive Project.

A. 8. Ordering Systems Skills: *Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.*

[X] Met

2012 Team Assessment: This criterion is met. Evidence of this criteria being met by Track I students was found in ARC 201: Integration of History -- Ancient and ARC 202: Integration of History -- Modern. Evidence of this criterion being met by Track II students was found in ARC 501: Architectural Design Studio 1-- Principles of Design, and ARC 502: Architectural Design Studio 2 -- Integration of History.

- A. 9. Historical Traditions and Global Culture: *Understanding* of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.**

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in exams and quizzes that are part of the course work in ARC 231/531: Architecture History 1 and ARC 234/534: Architecture History 2 for both Track I and II students.

- A. 10. Cultural Diversity: *Understanding* of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.**

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in ARC 231 & 234 (Track 1) and ARC 531 & 534 (Track 2): Architectural History 1 and 2.

- A.11. Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.**

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in Design Studios ARC 605, ARC 606, & ARC 607 (Tracks 1 & 2).

Realm A. General Team Commentary: The 2012 visiting team finds that students demonstrate a thorough background and competent skill level in Critical Thinking and Representation. Use of precedents and their integration into studio projects is particularly noteworthy for both track 1 and track 2 students. Also the program's development of technical drawing, digital representation and three-dimensional constructions is a strength of the program. The students learn how to represent ideas and forms in multiple media—drawing, digital, castings, constructions, etc.

Realm B: Integrated Building Practices, Technical Skills and Knowledge: Architects are called upon to comprehend the technical aspects of design, systems and materials, and be able to apply that comprehension to their services. Additionally they must appreciate their role in the implementation of design decisions, and their impact of such decisions on the environment. Students learning aspirations include:

- Creating building designs with well-integrated systems.
- Comprehending constructability.
- Incorporating life safety systems.
- Integrating accessibility.
- Applying principles of sustainable design.

- B. 1. Pre-Design: *Ability* to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.**

[X] Not Met

2012 Team Assessment: The team did not see evidence of ability to develop a comprehensive inventory for a building program, showing quantitative and qualitative characteristics of user requirements for a project. Ability to develop and apply site selection and design assessment criteria was not evident.

- B. 2. Accessibility: *Ability* to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.**

[X] Met

2012 Team Assessment: This criterion is met. Evidence of compliance was found for Track I in ARC 302: Design Studio 6 -- Models, Organizations + Environments and ARC 362: Architectural Programming. Evidence for Track II students was found in ARC 503: Architectural Design Studio 3 -- Integration of Technology and ARC 562: Architectural Programming.

- B. 3. Sustainability: *Ability* to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.**

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in ARC:241/541 – Introduction to Building Technology (Track I and II), and in ARC: 403 (Track I) and ARC 504 (Track II) – Comprehensive Design.

- B. 4. Site Design: *Ability* to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.**

[X] Met

2012 Team Assessment: This criterion is met. The team found evidence of the use and manipulation of topographical features, consideration of soil types, and site development issues in course ARC 241/541: Introduction to Building Technology for both Track I and II.

B. 5. Life Safety: *Ability to apply the basic principles of life-safety systems with an emphasis on egress.*

[X] Met

2012 Team Assessment: This criterion was met. Evidence was found for Track I students in ARC 301: Design Studio 5 -- Systems + Subjectivity and ARC 403: Design Studio 7 -- Comprehensive Project. For Track II students the criterion was met in ARC 503: Architectural Design Studio 3 -- Integration of Technology and ARC 504: Architectural Design Studio 4 -- Comprehensive Project

B. 6. Comprehensive Design: *Ability to produce a comprehensive architectural project that demonstrates each student's capacity to make design decisions across scales while integrating the following SPC:*

A.2. Design Thinking Skills

B.2. Accessibility

A.4. Technical Documentation

B.3. Sustainability

A.5. Investigative Skills

B.4. Site Design

A.8. Ordering Systems

B.8. Environmental Systems

A.9. Historical Traditions and Global Culture

B.9. Structural Systems

B.5. Life Safety

[X] Not Met

2012 Team Assessment: For Track I students the visiting team found ARC 403: Design Studio 7-- Comprehensive Project deficit in meeting the requirements for technical documentation and environmental systems integration. For Track II students taking ARC 504: Design Studio 4 -- Comprehensive Project the visiting team found deficiencies for technical documentation, environmental systems, and structural systems.

B. 7 Financial Considerations: *Understanding of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.*

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in ARC 362: Architectural Programming for Track I and ARC 562: Architectural Programming for Track II.

- B. 8. Environmental Systems: *Understanding* the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.**

[X] Met

2012 Team Assessment: This criterion is met. The team found evidence in ARC 241/541: Introduction to Building Technology and ARC 473/573: Environmental Controls 1 and ARC 475/575: Environmental Controls 2 for both Track I and II.

- B. 9. Structural Systems: *Understanding* of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.**

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in ARC 352/552, ARC 353/553 and ARC 354/554: Structures 1, 2 and 3 (Track 1 & 2).

- B. 10. Building Envelope Systems: *Understanding* of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.**

[X] Met

2012 Team Assessment: This criterion is met. Evidence for Track I students was found in ARC 403: Design Studio 7 -- Comprehensive Project and ARC 442 Construction Technology. The criterion is met for Track II students through ARC 504: Architectural Design Studio 4 -- Comprehensive Project and ARC 542: Construction Technology.

- B. 11. Building Service Systems Integration: *Understanding* of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems**

[X] Met

2012 Team Assessment: This criterion is met. Evidence for Track I students was found in ARC 473: Environmental Controls 1 and ARC 475: Environmental Controls 2. In addition, evidence of vertical transportation system and fire protection systems was found in ARC 403 : Design Studio 7 -- Comprehensive Project. Evidence of meeting this criterion for Track 2 students was found in ARC 573: Environmental Controls 1 and ARC 575: Environmental Controls 2. Evidence of understanding vertical transportation systems was found in ARC 504: Architectural Design Studio 4 -- Comprehensive Project.

- B. 12. Building Materials and Assemblies Integration: *Understanding* of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.**

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in ARC 301: Design Studio 5 (Track I) and ARC 504: Design Studio 4 (Track II).

Realm B. General Team Commentary: The 2012 visiting team found that the requirements for Integrated Building Practices, Technical Skills and Knowledge were found in the individual course work for the technical courses, but this knowledge was not integrated into the comprehensive design studio. The team observed a disconnect between the small-scale material explorations that are a hallmark for the program and the translation of these projects into the larger-scale assemblies associated with architecture projects.

Realm C: Leadership and Practice:

Architects need to manage, advocate, and act legally, ethically and critically for the good of the client, society and the public. This includes collaboration, business, and leadership skills. Student learning aspirations include:

- Knowing societal and professional responsibilities
- Comprehending the business of building.
- Collaborating and negotiating with clients and consultants in the design process.
- Discerning the diverse roles of architects and those in related disciplines.
- Integrating community service into the practice of architecture.

C. 1. Collaboration: *Ability to work in collaboration with others and in multi-disciplinary teams to successfully complete design projects.*

[X] Met

2012 Team Assessment: This criterion is met. There is evidence of group work in ARCH 362/562: Architectural Programming for both Track I and II. Multi-disciplinary work does occur between architecture and planning students in one of the sections of ARCH 607/608: Research Studio/Thesis, as well as in several elective courses. In student meetings with the team, students explained that jurors representing other disciplines are frequently present at critiques as well as being challenged by “clients” for studio projects who reside in the surrounding community.

C. 2. Human Behavior: *Understanding of the relationship between human behavior, the natural environment and the design of the built environment.*

[X] Met

2012 Team Assessment: This criterion is well met. The team found evidence in ARC 362/562: Architectural Programming for Track I and II. The team found the research component of this course to be distinctive in the way it integrated research methods, human factors and studio investigations.

C. 3 Client Role in Architecture: *Understanding of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.*

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in ARC 362/562: Architectural Programming and in ARC 482/582: Professional Practice for Track I and II students.

- C. 4. Project Management: *Understanding* of the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods**

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in ARC 482/582 – Professional Practice (Track I & 2).

- C. 5. Practice Management: *Understanding* of the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.**

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in ARC 482/582 – Professional Practice (Track I & 2).

- C. 6. Leadership: *Understanding* of the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.**

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in examinations and written papers for ARC 482/582 – Professional Practice (Track I & 2).

- C. 7. Legal Responsibilities: *Understanding* of the architect's responsibility to the public and the client as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.**

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in ARC 482/582 – Professional Practice (Track I & 2).

- C. 8. Ethics and Professional Judgment: *Understanding* of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues, and responsibility in architectural design and practice.**

[X] Met

2012 Team Assessment: This criterion is met. Evidence was found in examinations and written papers for ARC 482/582 – Professional Practice (Track I & 2).

- C. 9. **Community and Social Responsibility:** *Understanding* of the architect's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors.

[X] Met

2012 Team Assessment: This criterion is met. The team found evidence of compliance for Track I and II students in ARC 362/562: Architectural Programming where students conduct research into the accommodation of diverse populations and sustainable practices. In addition, the team found projects in ARC 403: Design Studio 7 – Comprehensive Project that explored alternative lifestyles and sustainable urban agriculture.

Realm C. General Team Commentary: The 2012 visiting team found a majority of the criteria in Leadership and Practice to be met in ARC 482/582: Professional Practice. The syllabi and student work products for this course were very thorough and comprehensive.

PART TWO (II): SECTION 2 – CURRICULAR FRAMEWORK

II.2.1 Regional Accreditation: *The institution offering 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).*

[X] Met

2012 Team Assessment: The University at Buffalo (UB) has maintained continuous accreditation by the Middle States Commission on Higher Education since 1921. The university was last reaccredited through the Periodic Review Report in 2009 (<http://www.buffalo.edu/content/www/provost/acredit/middle-states.html>).

II.2.2 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.*

[X] Met

2012 Team Assessment: The program provides a clear statement that the B.S. in Architecture is not a NAAB-accredited program (<http://www.ap.buffalo.edu/architecture/degrees/bsarch.asp>). Undergraduates are referred to the accredited degree web pages to make degree nomenclature and accredited status explicit. In addition, a show of hands at the student meeting suggested widespread understanding of the difference between the accredited program and the non-accredited undergraduate degree program.

II.2.3 Curriculum Review and Development

The program must describe the process by which the curriculum for the NAAB-accredited degree program is evaluated and how modifications (e.g., changes or additions) are identified, developed, approved, and implemented. Further, the NAAB expects that programs are evaluating curricula with a view toward the advancement of the discipline and toward ensuring that students are exposed to current issues in practice. Therefore, the program must demonstrate that licensed architects are included in the curriculum review and development process.

[X] Met

2012 Team Assessment: The visiting team was provided copies of faculty meeting minutes that provide evidence that the faculty undergo a process of formally identifying the strength and weakness of the curriculum from multiple sources, including practitioners, and use that information to make adjustments to the curriculum.

PART TWO (II) : SECTION 3 – EVALUATION OF PREPARATORY/PRE-PROFESSIONAL EDUCATION

Because of the expectation that all graduates meet the SPC (see Section 1 above), the program must demonstrate that it is thorough in the evaluation of the preparatory or pre-professional education of individuals admitted to the NAAB-accredited degree program.

In the event a program relies on the preparatory/pre-professional educational experience to ensure that students have met certain SPC, the program must demonstrate it has established standards for ensuring these SPC are met and for determining whether any gaps exist. Likewise, the program must demonstrate it has determined how any gaps will be addressed during each student's progress through the accredited degree program. This assessment should be documented in a student's admission and advising files.

[X] Not Met

2012 Team Assessment: The 2012 visiting team had the opportunity to review student folders to assess the specifics of the evaluation process for students entering the M. Arch program. The team focused specifically on those new students admitted to the 2-year Master program who did not graduate from the UB Bachelor of Science degree program. The team observed the assessment of this group of students was conducted in a more holistic and general manner. The files did not provide a detailed assessment of NAAB Student Performance Criteria that were required to be met for acceptance into the two-year M. Arch program. This observation was confirmed by student comments made at the all-school meeting.

PART TWO (II): SECTION 4 – PUBLIC INFORMATION**II.4.1 Statement on NAAB-Accredited Degrees**

In order to promote an understanding of the accredited professional degree by prospective students, parents, and the public, all schools offering an accredited degree program or any candidacy program must include in catalogs and promotional media the exact language found in the 2009 NAAB Conditions for Accreditation, Appendix 5.

[X] Met

2012 Team Assessment: The required NAAB language is available on the program's website (<http://www.ap.buffalo.edu/architecture/degrees/naab.asp>) and (<http://www.ap.buffalo.edu/architecture/degrees/march.asp>), as well as printed in the Undergraduate and Graduate Catalog.

II.4.2 Access to NAAB Conditions and Procedures

In order to assist parents, students, and others as they seek to develop an understanding of the body of knowledge and skills that constitute a professional education in architecture, the school must make the following documents available to all students, parents and faculty:

The 2009 NAAB Conditions for Accreditation

The NAAB Procedures for Accreditation (edition currently in effect)

[X] Met

2012 Team Assessment: These documents are available to students, parents, and others through the program's website at (<http://www.ap.buffalo.edu/architecture/degrees/naab.asp>) and the architecture library.

II.4.3 Access to Career Development Information

In order to assist students, parents, and others as they seek to develop an understanding of the larger context for architecture education and the career pathways available to graduates of accredited degree programs, the program must make the following resources available to all students, parents, staff, and faculty:

www.ARCHCareers.org

The NCARB Handbook for Interns and Architects

Toward an Evolution of Studio Culture

The Emerging Professional's Companion

www.NCARB.org

www.aia.org

www.aiaa.org

www.acsa-arch.org

[X] Met

2012 Team Assessment: Career development information is available through the program website (<http://www.ap.buffalo.edu/architecture/opportunities/careers.asp>).

II.4.4 Public Access to APRs and VTRs

In order to promote transparency in the process of accreditation in architecture education, the program is required to make the following documents available to the public:

All Annual Reports, including the narrative

All NAAB responses to the Annual Report

The final decision letter from the NAAB

The most recent APR

The final edition of the most recent Visiting Team Report, including attachments and addenda

These documents must be housed together and accessible to all. Programs are encouraged to make these documents available electronically from their websites.

[X] Met

2012 Team Assessment: These documents are available to the public and students in the architecture library.

II.4.5 ARE Pass Rates

Annually, the National Council of Architectural Registration Boards publishes pass rates for each section of the Architect Registration Examination by institution. This information is considered to be useful to parents and prospective students as part of their planning for higher/post-secondary education.

Therefore, programs are required to make this information available to current and prospective students and their parents either by publishing the annual results or by linking their website to the results.

[X] Met

2012 Team Assessment: This material is available in the architecture library.

III. Appendices:

1. Program Information

[Taken from the *Architecture Program Report*, responses to Part One: Section 1 Identity and Self-Assessment]

A. History and Mission of the Institution (I.1.1)

Reference State University of New York at Buffalo, *APR*, pp 3-5.

B. History and Mission of the Program (I.1.1)

Reference State University of New York at Buffalo, *APR*, pp. 5-8.

C. Long-Range Planning (I.1.4)

Reference State University of New York at Buffalo, *APR*, pp. 18-21.

D. Self-Assessment (I.1.5)

Reference State University of New York at Buffalo, *APR*, pp. 21-26.

2. Conditions Met with Distinction

A.6 Fundamental Design Skills – Students exhibited an exceptional ability to explore and present design ideas through multiple media types and multiple scales of form, including full-scale models. Students also expressed great enthusiasm for these design assignments, which begin at the very initial studio sequence ARC 201 and continue throughout their education at UB.

B.8 Environmental Systems – Students in both Tracks I and II complete a rigorous range of exercises in ARC 473/573: Environmental Controls 1 and ARC 474/574: Environmental Controls 2, as well as ARC 241/541: Introduction to Building Technology. Content in this suite of classes provides both a broad and in-depth range of understanding of environmental systems and their design.

C.2 Human Behavior – Students and faculty share a desire to explore, pursue, and research the relationship between human behavior and the design of the physical environment. In ARC 362/462: Architectural Programming the team found the research component of this course to be distinctive in the way it integrated research methods, human factors and studio investigations. The IDeA Center, part of the Inclusive Design research focus, extends this research into practice.

C.5 Practice Management – The visiting team found ARC 482/582: Professional Practice to provide an in-depth understanding of practice management. The reading assignments for the course cover a range of perspectives on many topics from the AIA, NCARB, and books written by practitioners. In the course students take multiple quizzes that clearly demonstrate a thorough understanding of content.

3. The Visiting Team

Team Chair, Representing the ACSA
David Cronrath
Dean and Professor
School of Architecture, Planning, & Preservation
University of Maryland
Campus Drive, Building 145, Room 1298
College Park, MD 20742-0001
(301) 405-8000
(301) 314-6784 fax
cronrath@umd.edu

Representing the AIA
Brian H. Griggs, AIA
Project Manager
Parkhill, Smith & Cooper, Inc.
1001 S Harrison, Suite A
Amarillo, TX 79101
(806) 376-8600
bgriggs@team-psc.com

Representing the AIAS
Michelle A. Morehead
105 N. 8th Street
Apt. 303
Lincoln, NE 68508
(402) 618-0479
michelleamorehead@gmail.com

Representing the NCARB
Paul G. May, AIA, LEED® AP
Miller Dunwiddie Architecture
123 North Third Street
Suite 104
Minneapolis, MN 55401
(612) 278-7712
(612) 337-0031 fax
pmay@millerdunwiddie.com

IV. Report Signatures

Respectfully Submitted,

**David Cronrath
Team Chair**

Representing the ACSA

**Brian H. Griggs, AIA
Team member**

Representing the AIA

**Michelle A. Morehead
Team member**

Representing the AIAS

**Paul G. May, AIA, LEED® AP
Team member**

Representing the NCARB

4.7. Catalog (or URL for retrieving online catalogs and related materials)

4.7.A Undergraduate Catalogue

<http://undergrad-catalog.buffalo.edu/academicprograms/arc.shtml>

4.7.B Graduate Catalogue

<http://ap.buffalo.edu/>

4.8. Annual Report Submission Statement of Accuracy



September 9, 2014

The National Architectural Accrediting Board, Inc.
1735 New York Avenue NW
Washington, DC 20006

As the Chair of the Department of Architecture at the University at Buffalo, State University of New York, I certify that all data submitted to the NAAB through the Annual Report Submission system since the last site visit is accurate and consistent with reports sent to other national and regional agencies including the National Center for Education Statistics.

Sincerely,

A handwritten signature in black ink, consisting of a stylized 'O' followed by a series of loops and a long horizontal stroke.

Omar Khan
Associate Professor and Chair
Department of Architecture

4.9. UB - MSCHE accreditation status 2004

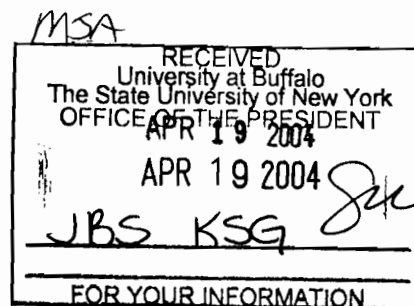


Middle States Commission on Higher Education

3624 Market Street, Philadelphia, PA 19104-2680 Tel: 215-662-5606 Fax: 215-662-5501
www.msache.org

April 15, 2004

Dr. John B. Simpson
Office of the President
State University of New York at Buffalo
Capen Hall
Buffalo, New York 14260-0001



Dear President Simpson:

At its session on April 14, 2004, the Committee on Substantive Change, on behalf of the Middle States Commission on Higher Education, acted to acknowledge receipt of the substantive change requests submitted by the State University of New York at Buffalo; to include the additional location at the Singapore Institute of Management within the scope of the institution's accreditation; and to include the additional location at the Center for American Education in Singapore provisionally within the scope of the institution's accreditation, pending approval by the Singapore Ministry of Education. The Committee directed a visit to both locations by December 1, 2004. The Periodic Review Report is due June 1, 2009.

Enclosed for your information is a copy of the Statement of Accreditation Status for your institution. The Statement of Accreditation Status (SAS) provides important basic information about the institution and its affiliation with the Commission, and it is made available to the public upon request. Accreditation applies to the institution as detailed in the SAS; institutional information is derived from data provided by the institution through annual reporting and from Commission actions. If any of the institutional information is incorrect, please contact the Commission as soon as possible.

Please check to ensure that published references to your institution's accredited status (catalog, other publications, web page) include the full name, address, and telephone number of the accrediting agency. Further guidance is provided in the Commission's policy statement *Principles of Good Practice in Institutional Advertising, Student Recruitment, and Representation of Accredited Status*, a copy of which is enclosed.

Please be assured of the continuing interest of the Commission on Higher Education in the well-being of the State University of New York at Buffalo. If any further clarification is needed regarding the SAS or other items in this letter, please feel free to contact Dr. John H. Erickson, Deputy Executive Director.

Sincerely,

Jean Avnet Morse
Executive Director

/clr

cc: Mr. Robert L. King, Chancellor, State University of New York

m:0395



Middle States Commission on Higher Education

3624 Market Street, Philadelphia, PA 19104-2680 Tel: 215-662-5606 Fax: 215-662-5501
www.msache.org

STATEMENT OF ACCREDITATION STATUS

STATE UNIVERSITY OF NEW YORK AT BUFFALO

Capen Hall

Buffalo, NY 14260-0001

Phone: (716) 645-2000; Fax: (716) 645-2895

www.buffalo.edu

Chief Executive Officer: Dr. John B. Simpson, President

System Information: State University of New York
Central Office
State University Plaza
Albany, NY 12246
Mr. Robert L. King, Chancellor
(518) 443-5355

Institutional Information

Enrollment 17,054
(Headcount): 17,054 Undergraduate; 9,114 Graduate
Control: Public
Affiliation: State
Institution Type: Doctoral/Research-Extensive
Degrees Offered: Associate's, Baccalaureate, Certificate, Master's, Doctorate, First Professional

Distance Learning: Ed.M. in General Education

National and Specialized Accreditation: Accrediting Board for Engineering and Technology, Inc.; American Association of Nurse Anesthetists, Council on Accreditation of Nurse Anesthesia Educational Programs; American Bar Association, Council on the Section of Legal Education and Admissions to the Bar; American Council on Pharmaceutical Education; American Dental Association, Commission on Dental Accreditation; American Library Association, Committee on Accreditation; American Occupational Therapy Association, Accreditation Council for Occupational Therapy Education; American Physical Therapy Association, Commission on Accreditation in Education; American Psychological Association, Committee on Accreditation; American Speech-Language-Hearing Association, Council on Academic Accreditation; Commission on Collegiate Nursing Education; Council on Rehabilitation Education; Council on Social Work Education; Joint Review Committee on Educational Programs in Nuclear Medicine Technology; Liaison Committee on Medical Education; National Accrediting Agency for Clinical Laboratory Sciences; National Architecture Accrediting

Board; National Association of Schools of Art & Design, Commission on Accreditation; Planning Accreditation Board.

Instructional Locations

Branch Campuses: None.

Additional Locations: Jamestown Community College, Jamestown, NY; St. Josephs Villa, Rochester, NY; College Center for the Finger Lakes, Corning, NY; Roswell Park Cancer Institute, Buffalo, NY; Renmin University of China, Beijing, PR China; Motorola University, Beijing, PR China; Singapore Institute of Management, Beijing, PR China; Center for American Education in Singapore, PR China.

Other Instructional Sites: Center for Applied Technology, Buffalo, NY; Market Arcade Theatre, Buffalo, NY.

Accreditation Information

Status: Member since 1921.

Last Reaffirmed: 2004.

Most Recent Commission Action: In March 2004, the Commission reaffirmed accreditation.

In April 2004, the Committee on Substantive Change, on behalf of the Commission, acted to acknowledge receipt of the substantive change requests submitted by the institution; to include the additional location at the Singapore Institute of Management within the scope of the institution's accreditation; and to include the additional location at the Center for American Education in Singapore provisionally within the scope of the institution's accreditation, pending approval by the Singapore Ministry of Education. The Committee directed a visit to both locations by December 1, 2004.

Brief History Since Last Comprehensive Evaluation: Self-Study Evaluation Visit, September/October 2003. Comprehensive self-study. In March 2004, the Commission reaffirmed accreditation. The Periodic Review Report is due June 1, 2009.

In April 2004, the Committee on Substantive Change, on behalf of the Commission, acted to acknowledge receipt of the substantive change requests submitted by the institution; to include the additional location at the Singapore Institute of Management within the scope of the institution's accreditation; and to include the additional location at the Center for American Education in Singapore provisionally within the scope of the institution's accreditation, pending

approval by the Singapore Ministry of Education. The Committee directed a visit to both locations by December 1, 2004. The Periodic Review Report is due June 1, 2009.

Next Self-Study Evaluation: 2013-2014.

Next Periodic Review Report: June 1, 2009.

Date Printed: April 15, 2004 (Not necessarily updated as of this date.)

Definitions

Branch Campus - A location of an institution that is geographically apart and independent of the main campus of the institution. The location is independent if the location: offers courses in educational programs leading to a degree, certificate, or other recognized educational credential; has its own faculty and administrative or supervisory organization; and has its own budgetary and hiring authority.

Additional Location - A location, other than a branch campus, that is geographically apart from the main campus and at which the institution offers at least 50 percent of an educational program.

Other Instructional Sites - A location, other than a branch campus or additional location, at which the institution offers one or more courses for credit.



Principles of Good Practice in Institutional Advertising, Student Recruitment, and Representation of Accredited Status

All accredited postsecondary institutions, or individuals acting on their behalf, must exhibit integrity and responsibility in advertising, student recruitment, and representation of accredited status. Responsible self-regulation requires rigorous attention to the following principles of good practice, which are explicitly stated in or inferred from *Characteristics of Excellence in Higher Education*, the commission's primary statement of standards:

Advertising, Publications, and Promotional Literature

1. Educational programs and services offered should be the primary emphasis of all advertisements, publications, promotional literature, and recruitment activities.

2. All statements and representations should be clear, factually accurate, and current. Supporting information should be kept on file and readily available for review.

3. Catalogs and other official publications should be readily available and accurately depict:

- a. institutional purposes and objectives;
- b. admission requirements and procedures;
- c. academic calendars and basic information on programs and courses, with required sequences and frequency of course offerings explicitly stated;
- d. degree and program completion requirements, including length of time normally required to obtain a degree or certificate of completion;

e. grievance procedures;

f. faculty and primary administrators (full-time and part-time listed separately) with degrees held and the conferring institution;

g. institutional facilities readily available for educational use;

h. rules and regulations for conduct;

i. grading system and related policies;

j. tuition, fees, and other program costs;

k. opportunities and requirements for financial aid;

l. policies and procedures for refunding fees and charges to students who withdraw from enrollment.

4. In college catalogs and/or official publications describing career opportunities, clear and accurate information should be provided on:

- a. national and/or state legal requirements for eligibility for licensure or entry into an occupation or profession for which education and training are offered;
- b. any unique requirements for career paths, or for employment and advancement opportunities in the profession or occupation described.

5. Information on student learning outcomes should be available to prospective students.

6. Policies and procedures regarding transfer of credit and credit for extra-institutional college-level learning should be published and implemented.

Student Recruitment for Admissions

1. Student recruitment should be conducted by well-qualified admissions officers and trained volunteers whose credentials, purposes, and position or affiliation with the institution are clearly specified.
2. Independent contractors or agents used by the institution for recruiting purposes shall be governed by the same principles as institutional admissions officers and volunteers.
3. The following practices in student recruitment are to be scrupulously avoided:
 - a. assuring employment unless employment arrangements have been made and can be verified;
 - b. misrepresenting job placement and employment opportunities for graduates;
 - c. misrepresenting program costs;
 - d. misrepresenting abilities required to complete intended program;
 - e. offering to agencies or individual persons money or inducements other than educational services of the institution in exchange for student enrollment. (Except for awards of privately endowed restricted funds, grants or scholarships are to be offered in accordance with applicable law.)

Representation of Accredited Status

1. The term “accreditation” is to be used only when accredited status is conferred by an accrediting agency recognized by the U.S. Secretary of Education and/or the Council for Higher Education Accreditation.
2. No statement should be made about *possible* future accreditation status or qualification not yet conferred by the accrediting body.

Statements like the following shown in *italics* are not permissible:

“(Name of institution) has applied for candidacy with the Commission on Higher Education of the Middle States Association of Colleges and Schools”;

“The _____ program is being evaluated by the National Association of _____, and it is anticipated that accreditation will be granted in the near future.”

3. Any reference to state approval should be limited to a brief statement concerning the actual charter, incorporation, license or registration given.
4. The phrase “fully accredited” must not be used, since no partial accreditation is possible.
5. When accredited status is affirmed in institutional catalogs and other official publications, in print, or via the Internet or other electronic transmissions, it should be stated accurately and fully in a comprehensive statement, including:
 - a. identifying the accrediting agency by name, including the agency’s address and telephone number;
 - b. indicating the scope of accreditation as:
 - (1) institutional (regional or national);

Example:

The University of _____ is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104, 215-662-5606. The Commission on Higher Education is an institutional accrediting agency recognized by the U.S. Secretary of Education and the Council for Higher Education Accreditation.

Note that the Commission is recognized by the U.S. Secretary of Education for accrediting activities in the Middle States region, which includes the District of Columbia, Delaware, Maryland, New Jersey, New York, Pennsylvania, Puerto Rico, and the U.S. Virgin Islands.

Institutions based outside of the United States, whether or not chartered or licensed within the Middle States region, may **not** make reference to the Commission’s recognition by the U.S. Secretary of Education. Any reference to accredited status may not imply that the Secretary’s recognition of the agency extends to foreign institutions.

(2) programmatic (curriculum or unit accredited must be specified).

Examples:

Programs in (Civil Engineering and Aeronautical Engineering) are accredited by the Accrediting Board for Engineering and Technology, a specialized accrediting agency recognized by the (the U.S. Secretary of Education and/or Commission on Recognition of Postsecondary Accreditation)

The Department of Music at the University of _____ is accredited by the National Association of Schools of Music, a specialized accrediting agency recognized by the (the U.S. Secretary of Education and/or the Council for Higher Education Accreditation).

Programs for the preparation of elementary, secondary, and special education teachers at the bachelor's and master's level, for the preparation of guidance counselors at the master's and specialist degree level, and for school superintendents at the specialist and doctoral degree level are accredited by the National Council for Accreditation of Teacher Education, a specialized accrediting agency recognized by the (the U.S. Secretary of Education and/or the Council for Higher Education Accreditation).

6. The accredited status of a program should not be misrepresented.

a. The accreditation granted by an institutional accrediting agency has reference to the quality of the **institution as a whole**. Since institutional accreditation does not imply specific accreditation of any particular program in the institution, statements like "this program is accredited," or "this degree is accredited," are incorrect and misleading. Institutions wishing to make a statement about the relationship of the degree or program to the institution as a whole should state that the program or degree is offered at an institution which is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools, 3624 Market Street, Philadelphia, PA 19104, 215-662-5606. The statement should also make clear that this accreditation does not imply specialized accreditation of the programs offered.

b. "Free-standing" institutions offering programs in a single field, e.g., a school of art, engineering, theology, granted accreditation by a regional or national institutional accrediting agency alone, should clearly state that this accreditation does not imply specialized accreditation of the programs offered.

c. Institutions granted the status of Candidate for Accreditation must use the following statement if they wish to describe that status publicly:

Candidacy for Accreditation is a status of affiliation with a regional accrediting commission which indicates that an institution has achieved initial recognition and is progressing toward, but is not assured of, accreditation. It has provided evidence of sound planning and the resources to implement its plans, and appears to have the potential for attaining its goals within a reasonable time. Further, the institution should indicate the effective date (month and year) candidate status was granted.

7. Institutions shall not display the logo of the Commission on Higher Education, Middle States Association of Colleges and Schools, to indicate the accredited status of the institution.



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