# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Dean’s Letter</td>
</tr>
<tr>
<td>7</td>
<td>Administration</td>
</tr>
<tr>
<td>8</td>
<td>Faculty &amp; Staff Listing</td>
</tr>
<tr>
<td>11</td>
<td>Undergraduate Study Abroad Programs</td>
</tr>
<tr>
<td>12</td>
<td>Undergraduate Degree Programs</td>
</tr>
<tr>
<td>16</td>
<td>111 Level Studio Description</td>
</tr>
<tr>
<td>17</td>
<td>112 Level Studio Description</td>
</tr>
<tr>
<td>18</td>
<td>212 Level Studio Description</td>
</tr>
<tr>
<td>20</td>
<td>312/412 Level Studio Description</td>
</tr>
<tr>
<td>30</td>
<td>Graduate Degree Programs</td>
</tr>
<tr>
<td>35</td>
<td>Graduate Study Abroad Programs</td>
</tr>
<tr>
<td>47</td>
<td>Guidelines for Comprehensive Options Studios</td>
</tr>
<tr>
<td>48</td>
<td>500/600 Level Studio Descriptions</td>
</tr>
<tr>
<td>56</td>
<td>Degree Project Description</td>
</tr>
</tbody>
</table>

---

**Dean’s Letter**

Architecture, Washington University in St. Louis
<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>69</td>
<td>Course Listings</td>
</tr>
<tr>
<td>92</td>
<td>Studio Assignment &amp; Selection Process</td>
</tr>
<tr>
<td>93</td>
<td>Message from the GAC</td>
</tr>
<tr>
<td>94</td>
<td>Message from the ASC</td>
</tr>
<tr>
<td>95</td>
<td>Digital Fabrication Information</td>
</tr>
<tr>
<td>96</td>
<td>Faculty Contact Information</td>
</tr>
<tr>
<td>100</td>
<td>Staff Contact Information</td>
</tr>
<tr>
<td>101</td>
<td>Lecture Series Schedule</td>
</tr>
<tr>
<td>102</td>
<td>Academic Calendar for Spring 2012</td>
</tr>
</tbody>
</table>
DEAN’S LETTER S/12, #11

ROLL CALL

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>408</td>
</tr>
<tr>
<td>Faculty</td>
<td>96</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>470</strong></td>
</tr>
</tbody>
</table>

Snøhetta

Craig Dykers, of the architecture firm Snøhetta arkitektur landskap, (www.snoarc.no) joins us this semester as the Ruth and Norman Moore Visiting Professor. Dykers, along with partner Kjetil Traedal Thorsen, founded Snøhetta in Oslo Norway in 1989. They opened an office in New York City in 2004 after winning the commission to design the National September 11 Memorial Museum Pavilion currently in the final stages of construction. Craig will be assisted in teaching by colleague Aaron Dorf and Associate Dean Peter MacKeith. The firm, numbering 85 people in Oslo and 26 in New York (50% women, 50% men) is named after a mountain in Norway. They climb the mountain once a year. Dykers says that it is like the design process where once you get to the top you see another peak recalling the Haitian aphorism Mountains Beyond Mountains. Their web site offers the following under the title Philosophy & Ethics: “Snøhetta focuses on ethics, corruption issues, climate responsibility and sustainable development. Sustainable development has environmental, financial and social aspects associated with it... Architecture cannot be contained simply by rules of order, instead it must accommodate the restless mind of human society.” Craig will also be chairing the jury for the Steedman Competition which occurs this spring. www.steedmancompetition.com

Additional visitors include Robert Stuart-Smith, David Ruy, and Oliver Schulze. Stuart-Smith will lead a digital fabrication studio along with Robert Booth. Stuart-Smith has taught at the Architectural Association and with Roland Snooks form the firm Kokkugia (www.kokkugia.com) with offices in London and New York. David Ruy, of Ruy Klein architects, (www.ruyklein.com) returns to Givens from New York where he partners with Karel Klein an associate professor at the Pratt Institute School of Architecture, he is the director of the Network for Emerging Architectural Research (NEAR). Oliver Schulze joins the Master of Urban Design program leading a studio project in Los Angeles. Schulze, director of Gehl Studio of Gehl Architects
Spring 2012

(www.gehlarchitects.com) in Copenhagen, will also join John Hoal in leading a workshop in Copenhagen over spring break. (www.gehlcitiesforpeople.dk) Kristi Dykema joins the landscape architecture faculty as a visiting professor teaching and option studio. Kristi is an assistant professor of landscape architecture at Louisiana State University where she looks at change over time in rural landscapes, with an emphasis on tracking patterns of adaptability in vernacular building traditions.

The semester kicks off with a new event sponsored by Studio L through the Laskey Fund which works to promote design excellence honoring the legacy of Professor Emeritus Leslie Laskey. The Sophomore Design Challenge will begin with a lecture by Challenge coordinator Kyna Leski. Professor Leski is the head of the Department of Architecture at the Rhode Island School of Design. Leski is the author of the first-semester architecture design curriculum, given for seventeen years to more than 1,500 students. A book on this pedagogy, The Making of Design Principles, was published in 2007. She bases her pedagogy on the workings of the creative process, the subject of a book that she currently is writing called Navigating the Creative Process.

The Sophomore Design Challenge will involve students teams of art and architecture students who will work on a project beginning Friday January 20 after the lecture concluding on Sunday the 22nd at 3:00. All faculty and students are encouraged to stop by the action in Givens, and Bixby on Saturday and attend the concluding exhibition and award of prizes on Sunday.

Eric Zencey, PhD, and Fellow with The Gund Institute for Ecological Economics at the University of Vermont joins us teaching a new seminar in ecological economics and professors Donnelly and Hansman are on sabbatical leave for the semester.

I am pleased to announce that Sung Ho Kim has been appointed Core Coordinator for the undergraduate program joining Director Igor Marjanovic and the faculty in the ongoing implementation of the new curriculum and degree programs. Sung Ho will be working with Ken Tracy this semester as Ken coordinates both the freshman and sophomore design studios in the introduction of digital design and fabrication techniques.

The Kind of Problem a School Is

In Jane Jacobs’ seminal 1961 book The Death and Life of Great American Cities, she concludes her treatise with a chapter titled The Kind of Problem a City Is. Drawing on work by Dr. Warren Weaver, Vice-President for the Natural and Medical Sciences of the Rockefeller Foundation and co-author with Claude Shannon of the groundbreaking book The Mathematical Theory of
Communication (1949), Jacobs applied Weaver’s three stages of development in the history of scientific thought to cities. They are 1. The ability to deal with problems of simplicity; 2. the ability to deal with problems of disorganized complexity; and 3. the ability to deal with problems of organized complexity. Weaver goes on to say that science first learned to deal with two-variable problems, then with the advent of probability theory and statistical mechanics science, had the capacity to deal with millions of variables (disorganized complexity). However, not all problems lent themselves to this kind of analysis; problems in life sciences such as biology for instance. Weaver states, “These problems, as contrasted with the disorganized situations with which statistics can cope, show the essential feature of organization... They are all problems which involve dealing simultaneously with a sizable number of factors which are interrelated into an organic whole” (organized complexity).

Jacobs makes the claim that cities are problems in organized complexity which present “situations in which a half-dozen or even several dozen quantities are all varying simultaneously and in subtly interconnected ways.” Jacobs uses the city park as an example where-by “any single factor about the park is slippery as an eel.” But she goes on to say that while there is “no use wishing it were a simpler problem... the interrelationships of their many factors are complex, there is nothing accidental, or irrational about the ways in which these factors affect each other.”

A school, like a city, is a problem of organized complexity. There is no wishing it were a simpler problem. Complexity, from the Latin complexus, means entwined or twisted together. What distinguishes a situation of disorganized complexity from one that is organized might be described as design. One of my favorite definitions of design is intent. It is also necessary that there be more than one part. It is difficult to imagine a complexity of one. For us this means architecture, landscape architecture and urban design. It also means the College and Graduate School of Architecture and Urban Design and the Sam Fox School. Nesting and scalar relationships are common traits of complex situations so this extrapolation could go on to the university and beyond. Our challenge is to avoid the situation of unorganized complexity.

Jacobs gives us some advice on what to do: think about process, work inductively from the particulars to the general, seek for “unaverage” clues involving very small quantities, which reveal the way larger and more “average” quantities are operating.” She goes on to say that as long as we cling to unexamined assumptions we lack “the first requisite for a body of practical and progressing thought.”
As we celebrate the 100th anniversary of the school of architecture my vision for the school is to build an environment of organized complexity which draws life and vitality from the differences and mutually reinforcing interrelationships of architecture, urban design, landscape architecture, and art. To make this happen we must examine our assumptions and look for the “unaverage clues,” that allow us to develop a body of “practical and progressing thought.” We must find more and better ways to work with each other all the while strengthening the disciplinary expertise that makes disciplines valuable. We must develop new relationships that bring energy to the environment and we must continually rediscover the importance of enjoying the ride. While it isn’t a simple problem, it is too much work not to be a passionate, rewarding, and ongoing effort that I look forward to working on with you.

Sincerely,

Bruce Lindsey, Dean
ADMINISTRATION

College of Architecture, Graduate School of Architecture & Urban Design

Dean
Bruce Lindsey, AIA, E. Desmond Lee Professor

Director, Undergraduate Programs
Associate Professor Igor Marjanovic

Director, Graduate Programs
Professor Kathryn Dean

Chair, Graduate Architecture
Associate Professor Heather Woofter

Chair, Master of Urban Design Program, (MUD)
Associate Professor John Hoal

Chair, Master of Landscape Architecture Program, (MLA)
Professor Dorethee Imbert

Director, Architectural Technology Program
Senior Lecturer William Wischmeyer

Director of International Programs
Adrian Luchini, Raymond E. Maritz Professor

Sam Fox School of Design & Visual Arts

Dean
Carmon Colangelo, E. Desmond Lee Professor

Associate Dean
Associate Professor Peter MacKeith

Associate Dean of Students
Georgia Binnington

Washington University in St. Louis

Chancellor
Mark Wrighton
FULL-TIME FACULTY
Kathryn Dean, JoAnne Stolaroff Cotsen Professor / Director Graduate Programs
Paul Donnelly, Rebecca & John Voyles Professor
Jain Fraser, Professor
Dorothee Imbert, Chair Landscape Architecture
Stephen Leet, Professor
Bruce Lindsey, E. Desmond Lee Professor / Dean
Adrian Lucchini, Raymond E. Maritz Professor / Director International Programs
Robert McCarter, Ruth & Norman Moore Professor
Eric Mumford, Professor
Christof Jantzen, I-CARES Professor of Practice
Gia Daskalakis, Associate Professor
Bob Hansman, Associate Professor
John Hoal, Associate Professor / Chair Urban Design Program
Sung Ho Kim, Associate Professor
Zeuler Lima, Associate Professor
Peter MacKeith, Associate Professor / Associate Dean Sam Fox School
Igor Marjanovic, Director Undergraduate Programs / Associate Professor
Heather Wooten, Associate Professor / Chair, Graduate Architecture
Patty Heyda, Assistant Professor
Derek Hoeferlin, Assistant Professor
Seng Kuan, Assistant Professor
Natalie Yates, Assistant Professor
Christine Yogiaman, Assistant Professor

VISITING FACULTY
Kristi Dykema, Visiting Professor
Craig Dykema, Ruth & Norman Moore Visiting Professor
David Ruy, Visiting Professor
Oliver Schulze, Visiting Professor
Robert Stuart-Smith, Visiting Professor
Andrew Colopy, Visiting Assistant Professor
Sarah Cowles, Visiting Assistant Professor
Andrew Cruse, Visiting Assistant Professor
Forrest Fulton, Visiting Assistant Professor
Eric Hoffman, Visiting Assistant Professor
Justin Scherma, Visiting Assistant Professor
Ken Tracy, Visiting Assistant Professor
FACULTY & STAFF

AFFILIATE FACULTY
Janet Baum, Senior Lecturer
Ben Fehrman, Senior Lecturer
Catalina Preixas, Senior Lecturer
Phil Holden, Senior Lecturer
Rich Janis, Senior Lecturer
George Johannes, Senior Lecturer
Don Koster, Senior Lecturer
Gay Lorberbaum, Senior Lecturer
Pablo Moyano, Senior Lecturer
Phillip Shinn, Senior Lecturer
Lindsay Slouffer, Senior Lecturer
Bill Wischmeyer, Senior Lecturer

Hunter Beckham, Lecturer
Charles Brown, Lecturer
Robert Booth, Lecturer
Andrew Faulkner, Lecturer
Jim Fetterman, Lecturer
Carolyn Gaidis, Lecturer
John Guenther, Lecturer
Easley Hamilton, Lecturer
Brok Howard, Lecturer
Gregg Hutchings, Lecturer
Dennis Hyland, Lecturer
Rick Kacenski, Lecturer
Carl Karlen, Lecturer
Elisa Kim, Lecturer
Andreas Kultermann, Lecturer
Kevin Le, Lecturer
Nick McFadden, Lecturer
Albie Mitchell, Lecturer
Timothy Montgomery, Lecturer
Stephen Mueller, Lecturer
John Mueller, Lecturer
Jonathan Murphy, Lecturer
Mike Nicas, Lecturer
Andrew Raimist, Lecturer
Hannah Roth, Lecturer
Peter Salisch, Lecturer
Jim Scott, Lecturer
Akshita Sivakumar, Lecturer
Nathaniel Smith, Lecturer
Jonathan Stitleman, Lecturer
Lavender Tessner, Lecturer
Andrew Weil, Lecturer
Eric Zencey, Lecturer
Catty Dan Zhang, Lecturer
Tomislav Zigo, Lecturer
Spring 2012

Carl Safe, Professor Emeritus
Leslie J. Laskey, Professor Emeritus
Constantine E. Michaelides, Dean Emeritus
Kimmo Friman, Lecturer Abroad
Sirkka-Liisa Jetsonen, Lecturer Abroad
Pentti Kareoja, Lecturer Abroad
Matti Rautiola, Lecturer Abroad
Julie Scheu, Lecturer Abroad

STAFF
Heather Atkinson, Administrative Assistant
Ellen Bailey, Administrative Assistant
Bruce Carvell, Registrar
Daphne Ellis, Assistant to the Dean
Kathleen O’Donnell, Graduate Admissions Coordinator
Leland Orvis, Facilities Director
Martin Padilla, Career Development Director
UNDERGRADUATE STUDY ABROAD

Studios Abroad
The School has a number of international semesters for both graduate and undergraduate students. In this complex and interdependent world where borders are crossed daily it is important that future architects understand other places and their cultures. Therefore, we provide in-depth experiences on three continents and in both hemispheres.

Undergraduates who are obtaining the Bachelor of Science degree or the Bachelor of Arts degree can apply to attend the School’s Florence Program in the spring of their junior year, the School’s Buenos Aires Program in the fall of their senior year or the Denmark International Studies Program (DISP) in Copenhagen, Denmark in the fall of their senior year. They receive a full semester’s worth of credit.

Graduate programs abroad are described in conjunction with the graduate degree programs on page 38.
<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Introduction to Design Processes I (AR111)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Introduction to Design Processes II (AR112)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Western Civilization I (L22 101C)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Calculus (L24 131)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Distribution Requirement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Distribution Requirement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Writing I (L18 100)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Western Civilization II (L22 108C)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Distribution Requirement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Elective</td>
<td></td>
</tr>
<tr>
<td>Year 2</td>
<td>Fall</td>
<td>Spring</td>
</tr>
<tr>
<td></td>
<td>Introduction to Design Processes III (AR811)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Issues in Design I (AR811A)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physics (L31 117A or L31 197)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Architectural History II (AR8884)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Distribution Requirement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Issues in Design II (AR812A)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Architectural History I (AR8886)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Distribution Requirement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Distribution Requirement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Elective</td>
<td></td>
</tr>
<tr>
<td>Year 3</td>
<td>Fall</td>
<td>Spring</td>
</tr>
<tr>
<td></td>
<td>Architectural Design I (AR8311)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Architectural Representation (AR820A)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Case Studies 20th Century (AR8835)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Architectural or General Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Architectural Design II (AR8312)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Architectural Representation (AR8308)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>General Distribution Requirement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Building Systems I (AR847)</td>
<td></td>
</tr>
<tr>
<td>Year 4</td>
<td>Fall</td>
<td>Spring</td>
</tr>
<tr>
<td></td>
<td>Architectural Design III (AR411)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Systems I (AR438)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structures I (AR447A)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>History Theory Elective or Urban Issues Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Architectural Design IV (AR412)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structures II (AR47B)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Architectural or General Elective</td>
<td></td>
</tr>
</tbody>
</table>

120 total credits minimum
Bachelor of Arts / Major in Architecture

120 total credits minimum

Note: students in their last two semesters of the Bachelor of Arts Program may take courses in: architectural or general electives; minor subject study; or second major study.

YEAR 1

**Fall**
- Introduction to Design Processes I (AR111)
- Introduction to Architecture I (AR111A)
- Western Civilization I (L22 101C)
- Calculus (L24 131)
- General Distribution Requirement
- General Distribution Requirement

**Spring**
- Introduction to Design Processes II (AR112)
- Introduction to Architecture II (AR112A)
- Writing I (L13 100)
- Western Civilization II (L22 102C)
- General Distribution Requirement
- General Elective

YEAR 2

**Fall**
- Introduction to Design Processes III (AR211)
- Issues in Design I (AR211A)
- Physics (L31 117A or L31 197)
- Architectural History II (AR328A)
- General Distribution Requirement
- General Elective

**Spring**
- Introduction to Design Processes IV (AR212)
- Issues in Design II (AR212A)
- Architectural History I (AR328B)
- General Distribution Requirement
- General Distribution Requirement
- General Elective

YEAR 3

**Fall**
- Architectural Design I (AR311)
- Architectural Representation (AR303A)
- Case Studies 20th Century (AR353)
- Architectural or General Elective

**Spring**
- Architectural Design II (AR312)
- Architectural Representation (AR303B)
- General Distribution Requirement
- Building Systems I (AR347)

YEAR 4

**Fall**

**Spring**

Undergraduate Degree Programs (excluding the class of 2015 and beyond)
Bachelor of Design / Major in Architecture

Year 1
- Fall
  - Introduction to Design Processes I (AR111)
  - Drawing I (X10 101)
  - Practices in Architecture + Art + Design I (X10 181)
  - History of Western Art, Architecture & Design (L01 113)
  - Calculus (L24 131)
  - General Distribution Requirement

- Spring
  - Introduction to Design Processes II (AR112)
  - Drawing II (X10 102)
  - Practices in Architecture + Art + Design II (X10 182)
  - Intro to Modern Art, Architecture & Design (L01 215)
  - Writing I (L13 100)
  - General Distribution Requirement

Year 2
- Fall
  - Introduction to Design Processes III (AR211)
  - Physics (L31 117A or L31 197)
  - Architectural History II (AR284)
  - General Distribution Requirement

- Spring
  - Architectural Design I (AR311)
  - Building Systems I (AR347)
  - General Elective
  - Architectural or General Elective
  - Architectural or General Elective
  - Architectural Design II (AR312)
  - Sam Fox Commons
  - Architectural or General Elective

Year 3
- Fall
  - Sam Fox Commons
  - Architectural Design I (AR311)
  - Building Systems I (AR347)
  - Case Studies 20th Century (AR333)

- Spring
  - Architectural Design II (AR312)
  - Sam Fox Commons
  - Architectural or General Elective
  - Architectural or General Elective

Year 4
- Summer
  - Architectural Design III (AR313)
  - Sam Fox Commons
  - Architectural Design IV (AR314)

Note: students in their last two semesters of the Bachelor of Arts Program may take courses in architectural or general electives; minor subject study; or second major study

122 credits minimum credits
ARCH 111 INTRODUCTION TO DESIGN PROCESSES I
Carl Karten, Lecturer

Course Description:
This introductory architectural design studio engages the basic principles of architectural context, composition and experience. Through various field/work strategies, students explore architectural context through observation, analysis and invention. The site-specific design processes bridge two-dimensional and three-dimensional work, including drawing, drafting and making. The experiential qualities of architecture are introduced through basic considerations of scale and human interaction. The coursework includes studio, work, lectures, presentations by students, readings, writing assignments and field trips.

Project Description:
Arch111 is a project-based studio located within the broader discourse about architecture and culture. It focuses on the engagement of thoughts, ideas and imagination through a variety of material processes and a sustained dialogue between 2D to 3D design. Situated in the Wellston Loop area of North St Louis, the projects deal with a careful exploration of volumetric and tectonic aspects of architecture – from a study of surfaces and found objects to design proposals for a small community garden and a potting shed. The course culminates in a well-articulated portfolio of work, demonstrating design literacy in visual, verbal and written forms.

Course Learning Outcomes:
• Ability to think critically and creatively and to apply these skills in one’s own design work.
• Basic ability to understand and develop visual organization in both 2D and 3D design.
• Ability to understand the relationship between space and drawing.
ARCH 112 INTRO TO DESIGN PROCESSES II
Ken Tracy, Visiting Assistant Professor, Coordinator
Andrew Cology, Visiting Assistant Professor
Jonathan Stitelman, Lecturer

“CNN during the first Gulf War, kept advertising itself as the network that “brings the front line to your living room.” Architecture is always about the definition of what is inside and outside—what is public and what is private—and here was a complete collapse of these terms.”
- Beatrice Columina, Artform interview, 2007

Certain binary oppositional relationships form some of the most fundamental assumptions in architecture. Figure/ground, subject/object, public/private, mass/void and inside/outside relationships are the basis for both the conception and understanding of most architecture. In her statement above Beatrice Columina challenges these assumed opposites and shows how mass media can conflate these apparently immutable dichotomies. Other philosophical arguments have been made which also subvert or even erase the ridged line separating these culturally conceived oppositions.

112 Studio explores the boundary or profile between different spatial, geometric, material and cultural conditions. With an emphasis on perceptual effects these boundaries will be formed, represented and evaluated. The primary tools for representation and constructs will be 3d modeling and digital fabrication.

Physical output through the use of software and digital fabrication techniques will be integrated into the studio for all exercises. The geometric principles embedded in computer modeling will be juxtaposed with the constraints of digital output machines. Techniques to bridge between these integrated but incongruous techniques will be introduced and explored.
Measurement, structure, connections and anchoring will be investigated through a series of process-heavy output.

**Technology & Techniques**

In the final scene of film *Aliens* (James Cameron, 1986) the main character Ripley played by Sigourney Weaver uses a power loader to fight the queen alien. The loader seamlessly responds to Ripley’s body and allows her to punch a 9’ tall, 600lb alien in the face. The two spar in a choreographed struggle that ends with the alien being tossed into space through an air lock. Ripley’s identity is intermingled with the loader like that of a business man and business suit. This type of technological extension of dexterity and finesse will be the goal of our use of design technologies.

3D modeling, digital fabrication and rendering should be seen not as esoteric, automatic processes but as a nuanced extension of our intent. Through subtle control of proportion, iterative sculpting of form and the multiplication of elements we will use technology to intensify the crafting of space.

**Project(s)**

The studio will be comprised of a series of 4 exercises which will build up to a final project.

**Exercise 1 Perceptual Augmentation Container**

We will create a container for something from a site. This container will re-present the material from the site and tell some story about it. The container will be designed in the computer and then 3d printed. The container will be made of 2-4 parts that fit together precisely.

**Exercise 2 Topology/Topography**

The project will start by measuring the site. Through the series of surveyed points a biased spatial matrix will be delineated and then skinned to recreate the site terrain. This terrain will then be reconsidered and manipulated based on the potential movement through and on the site.
Exercise 3 Matrix/Membrane

Through a biased, geometric reinterpretation of the site's physical, material, phenomenal and spatial properties students will create a spatial matrix. This spatial matrix will suppress certain information and intensify others. Attachment, anchoring and embedment will be explored as students intervene in the site to create a programmed membrane.

Exercise 4 Inside

Students will define their programmed membrane in terms of interior spatial effects, structure and mass.

Dean’s Letter

Architecture,
Washington University
in St. Louis
Course Description
The last century saw the explosive growth of cities. Infrastructure was often stretched, even overwhelmed, and architecture became increasingly isolated from the urban flux, delivering huge buildings in the city centers and vast developments in their suburbs. With the modernization of much of the world just catching up, architects will have the opportunity to participate in many other ways. One of the most critical will be the insertion of modest yet surprising buildings into the existing city fabric, urban components that compliment yet challenge the evolution of existing cities. This is the realm of incremental architecture.

The intent of this studio is to build the city by designing small parts of it: single urban building complexes.

With this in mind, each project will be conceptually developed and critically viewed from three distinct perspectives. First, each project will be understood as a thing in itself: a coherent synthesis of purpose-driven and experientially profound decisions. Second, each project will be developed as an assembly of component parts: each element of the building fabric clearly articulated in its own right, yet intelligently and creatively integrated into the whole. And finally, and perhaps most significantly, each project will be understood as a component part of a larger construct - the city (or at least a part of it). It is this latter aspect that will drive much of the studio discussion.

In order to exercise these perspectives, we will place our project in areas of the city that are in need of our attention and worthy of our affection. Our goal is not so much to reinvent these areas or totally redesign them, but rather to enhance and invigorate them. We will pull forth from existing conditions frameworks of formal and experiential figuration that can guide the development of new interventions. Our intentions will be incremental.

Some additional topics will also be explored. One will be densification (that is, increasing density of activity and density of useful and meaningful place). In this way we will address issues of social amenity, convenience, communality and sustainability. Furthermore, as our second project will include several independent programs, we will emphasize the myriad gradations of proprietary layering - from very private to fully public. This charges the designer with the task of creating “a system of meaningful spaces” (Norberg-Schultz), thus defining thresholds from one kind of place to another, both within the project and with its urban surroundings. Additionally, we will bring our focus
down to the scale of the building fabric, to the level of tectonic
development. Each project will be developed as an assembly of
parts, and the key parts – structure, enclosure, fenestration, etc. –
will be articulated as clearly designed components.

**Project Descriptions**

We will design urban street buildings. The project programs will
be modified in response to site evaluation and opportunity - what
is needed or valuable, how much, how big, etc., and with concern
for public amenity as well.

We will work on two major projects. Several short exercises will
be interspersed to explore certain relevant topics. Each project
will address an archetypal urban site condition, and each will
explore programs which contribute to the quality of life in the
city. The first will focus on public use, service and amenity – a
single use building. The intent is to focus our attention on internal
organization and experiential quality on the one hand, and to the
relationship between the external form of the building and its
milieu on the other. The second project will contain complex, even
unrelated, programmatic components: a multi-use urban street
building. It will provide a mix of some or all of the following:
places for private life (home), work (office), commercial activity
(retail) and cultural/entertainment events. This mix is part of
the densification objective mentioned above, as is determining size
(area/volume/mass).

**Course Goals**

We will be working on sites in parts of the city that need
invigoration, enhancement and evolution. Our programs will be
developed to maximize life, vitality, amenity, and communality.
They will create density and fullness, bringing life to the street
and the common domain of the city.

Accordingly the goals of the course are to explore the relationship
between the three scales of architectural responsibility: building
as a thing; building as a synthesis of parts; and building as
a component of the city. Developing formal frameworks that
connect and articulate these levels of conceptualization and
realization will be a major part of your studio effort. Exploring
methods of representation that effectively model the issues,
opportunities and refinement of the projects is expected.

**Schedule**

<table>
<thead>
<tr>
<th>Exercise 1: Façade Design</th>
<th>1 week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project 1: Small public use building</td>
<td>4 weeks</td>
</tr>
<tr>
<td>Exercise 2: Tectonic/material study</td>
<td>1 week</td>
</tr>
<tr>
<td>Project 2: Multi-use building</td>
<td>7 weeks</td>
</tr>
</tbody>
</table>
ARCH 312/412 ARCHITECTURAL DESIGN II/IV
Forrest Fulton, Visiting Assistant Professor

CITY STUDIO AT PATRICK HENRY DOWNTOWN ACADEMY

(Design-Build Studio)
This design build studio builds upon the inaugural City Studio project completed last spring in partnership with Patrick Henry Downtown Academy, an elementary school in the St Louis Public Schools system. The school wished to develop an outdoor, interactive learning space “that inspired active enthusiasm and unity in the community.” In the Spring of 2011 students worked with Henry Academy staff and students to develop a master plan for the school grounds. They then built the first phase, a series of demonstration gardens coined Learning Landscapes, which include an outdoor classroom, a learning garden, and an active play space.

This semester’s projects will both strengthen last year’s projects and create new projects for the school and the community. The community will be sought as a partner in designing and creating projects, with the intention of creating a sense of ownership among the community. Private and public stakeholders will partner with the studio to gather input and develop projects. The studio will document the engagement and the community’s desired outcomes. Such documentation will further build the studio and our relationship with the community in future years.

Within this framework, the studio will proceed in three phases:

Evaluation and Conceptual Design: 4 weeks
Students will first evaluate last year’s projects and consider opportunities with neighborhood residents, school leadership and staff, and other stakeholders. Students will help organize meetings, create questionnaires, and do field work to gather input. There will be a strong intention to either facilitate a stronger community connection to the school gardens or help community leaders develop a project of their own.

Evaluation will also take place via on-site construction. The studio will construct a pavilion from last year’s master plan. This process will familiarize students with the context and community. It will also help students develop construction skills and experience that can be applied to their own projects later in the semester.
Teams of students will conceive projects that emerge from this evaluation process. Projects may include, but are not limited to, the following: a pavilion, public spaces, an irrigation system, and additional plantings. Projects may be built on the school grounds or in adjacent community spaces.

**Design Development and Construction Drawings : 4 weeks**
Students will develop, detail, and thoroughly draw their designs for construction.

**Construction: 6 weeks**
Students will fabricate and construct the projects.
Pruitt-Igoe Pasts, Futures
The studio will reach across scales and time to map histories and design futures for the long-time vacant site where the Pruitt-Igoe housing project once stood at the edge of downtown St. Louis City. Pruitt-Igoe represents a space of particularly loaded urban, environmental and social histories in St. Louis. It is the site where an enormous, multi-building public housing experiment played out in the 1950’s, as part of a Modernist vision to restore health in the city through “urban renewal”. After becoming an unlivable scene of crime and neglect, it was demolished some 20 years later and has stood vacant ever since. Today it is a wild, vegetated landscape very close to the heart of the downtown, and the center of new development visions for St. Louis. Students will be asked to grapple with the legacy and realities of this place where contested agendas, memories, meanings, facts, and natural and material systems interact and overlay. In doing so, students will be asked to challenge terms like “sustainability,” “urban development,” the “public” and “landscape” in the city.

Pruitt-Igoe Now
The studio runs concurrent with an open ideas competition Pruitt-Igoe Now. Students will draw from materials provided by the competition website including viewing the recent documentary The Pruitt-Igoe Myth, while also conducting original research from across other sources (in groups). After the substantial research and mapping/analysis phase, students will build broad-
based proposals for the Pruitt-Igoe site. Students will submit their design proposals for entry to the competition (due March 19), then will work to develop schemes further in the remaining portion of the semester.

Goals
Cities comprise layered and complex territories, where public and private realms operate both regionally and locally. The studio is organized in a way that will guide students in how to first ‘see’, then engage, sites in relationship to these broader systems. Systems include environmental systems like water management and brownfield considerations; economic systems like tax incentives and real estate development variables; social systems and the associated layers of urban histories in St. Louis; spatial, material, organizational and circulatory systems which inform typologies of the city and other patterns of urbanization. Students will use their acquired understanding of landscape/urbanism systems to formulate varied design proposals that also engage time and scale in re-imagining the site as an intrinsic part of a dynamic city.

Skills/Techniques
This course will provide the vocabulary, techniques, historical and theoretical context, foundational research and design methods and skills necessary to understand the roles of urban designers and landscape architects. As such, the course equips any architecture student with fundamental skills for locating and engaging projects within their broader contexts.

This course fulfills the required Urban Design Studio option for undergraduates pursuing the Minor in Urban Design.

Evaluation
Students will be evaluated based on their commitment and abilities as demonstrated in their work progress at daily desk crits, pin-ups and reviews. Particularly, students will be assessed according to: overall growth and development as seen through process, effort, productivity, rigor and engagement of the studio challenges; responsiveness to criticism, understanding and the development of an ability to self-critique; the overall design, craft, work quality in models and representation; participation in reading/lecture discussions and studio; attendance.
Cinema Archive and Cinema-Theque

This studio’s premise is two-fold, involving both architecture and urban design. The studio’s project will be the design of an archive of Italian cinema and cinema-theque, plus the recuperation of a neglected but strategically located piazza in Florence, Italy.

**SETTING**

The city of Florence, Italy is the locus of 14th & 15th century discoveries and innovations in western painting, architecture and sculpture. Cinema is the 20th century’s new form of representation and narrative, and the work of Italian directors of the 1950s thru the 1970s, was substantial, influential and international.

The studio will investigate the resonance between these modes of representation - examples of both historical and contemporary visual culture in a city enriched with an extraordinary range of representation, architecture, and urban space.

**SITE**

The studio’s site, Piazza del Carmine, is located within the Oltrarno quarter of Florence, Italy. Piazza del Carmine is presently a car choked parking lot, inhospitable to public use. It is also the site of the Church of Santa Maria del Carmine, an undistinguished late 18th century church with no façade, famous primarily for Masaccio's 15th century frescoes in the Brancacci Chapel.

Florence, Italy and Piazza del Carmine are ideal for the siting of an Italian cinema archive and cinema-theque for reasons specific to the site and to those of national and international tourism. Locally, the presence of the Brancacci chapel's frescoes are the earliest examples of narrative fresco painting realizing accomplished perspective and chiaroscuro techniques as well as an historically significant moment in the history of representation. Masaccio’s (Masolino’s and Lippi’s) 18th century frescoes are cinematic in scale, perspective, shifting points of view, and lighting. And, the frescoes depiction of a “realistic” contemporary Italian setting, share affinities with the thematic content of Italian directors of the 20th century, particularly, the “neo-realism” period of post-war Italian cinema.

As Florence is one of the most visited cities in Italy by tourists, the city is ideally suited for a building whose program archives, preserves, promotes and attempts to revive the most contemporary form of visual culture, cinema, which is
international in scope but in decline in Italy, due largely to former Italian Prime Minister Silvio Berlusconi’s control of media. Under Berlusconi’s rule, the quality and support of Italian cinema has waned, and Italian attendance to theaters dropped. As a consequence, a generation of Italians is now unaware of the quality, history and contributions of Italian cinema, having been saturated with Berlusconi’s controlled diet of television game-shows, talk-shows, reality shows, and phone-ins.

**RESEARCH**

The studio will begin with research into the urban form of the city, the public spaces in Florence, and the studio’s site, Piazza del Carmine. The studio will also be introduced to the work of the Italian directors Antonioni, Bertolucci, Fellini, Pasolini, Rossellini and Visconti. Precedent studies of recent cinema-theques and media-theques will also be undertaken. Prior to design, research will also include lectures on Italian cinema, the city of Florence, and representation. Research will also include readings and screenings of Italian cinema.

**FIELD TRIP**

A 1 week field trip to Florence led by the professor is scheduled for the first week of March (March 5 thru 9) with visits to the building site, and to cultural sites within Florence. The timing of the Florence field trip, one week prior to spring break, will allow students who wish to extend their stay beyond the scheduled field trip dates into the following week of the break.

**DISEGNO: DEVELOPMENT AND GOALS**

The studio will privilege the section over the plan, the ceiling over the floor, and physical models over 2d representation. Initial spatial proposals will be developed and supported by preliminary 3dimensional conceptual studies thru model making. These will be explored in the first weeks of the semester, concurrent with research into Italian cinema and urban form.

The historical site will foreground the awareness of change and continuity. Fundamentally, the studio and program will address the ongoing, perennial and elemental concerns of architecture: how to transform the city thoughtfully by qualifying space light and material.
Global Features: Monte Carlo Revisited

“A strange world is beckoning, which will depend upon an awareness of what environment can be generated within the brain, and perhaps the old, tactile/tangible environment become the dream.”

Archigram 9, 1970

Project Description

In this last issue of the iconic Archigram magazine, a powerful metaphor of the environment is portrayed – a concept of the environment as a cultural and mental construct, as a personal and collective dream. Perhaps a reflection on the overall state of architecture in the early 1970s, these words could also be read as a reflection on one of Archigram’s most iconic, yet probably also most enigmatic projects – Features: Monte Carlo. In 1969, the Archigram Group entered a competition to design a multi-functional entertainment and recreational space in the city of Monte Carlo, Monaco. The project was a landscape proposal that engaged the ground and the sea through a combination of under- and above-ground spatial features. The project went through various iterations and as it was nearing the construction phase, it prompted the Archigram Group to formally establish their architectural practice. Ultimately, the project fell through, resulting in the dispersal of the Archigram members around the world, yet they continued to collaborate over great distances, sustaining a dialogue of ideas through mail and other forms of media exchange.

This studio will revisit Archigram’s working model of delayed conversation, engaging in a critical dialogue through beautifully crafted drawings and artifacts. These visual resources will serve as vehicles to critique each other’s work and to engage in an international dialogue about the critical questions raised by Archigram’s Monte Carlo project. By illuminating these questions from the contemporary perspective, students will be challenged to think about the idea of the environment on a global scale, addressing it as a cultural, social and technological construct. In order to sustain this dialogue with context and specificity, the studio will engage the historical program of the city of Monte Carlo – a place of multiple cultural facets, where local Italian, French and Occitan cultures blend with a truly global diaspora. Furthermore, the city was founded on the merger of health-related
bathing treatments and the lucrative entertainment industry. Through a series of iterations and conversations, the projects will evolve into a series of spaces and events of **cleansing** and **entertainment**. While these two types of activities are emblematic of Monte Carlo’s complex history, they also engage broader dichotomies of contemporary environments around the world – literal/metaphorical, health/amusement, and physical/ephemeral – allowing each project to develop unique combinations of public events. The projects will progress from domestic to environmental scale, operating simultaneously on personal, communal and overall systematic levels.

The studio will bring together graduate and undergraduate students in an ambience of collaborative conversation. The studio will also engage in an international dialogue, including Dennis Crompton, one of the founding members of the Archigram Group, and other voices from around the world. As part of this studio, there will be an optional field trip to Monte Carlo for the purposes of a workshop and site visit.
MArch 3 Program
as of Fall 2010

Year 1
Fall
- Architectural Design I (AR317)
- Concepts and Principles (AR339)
- Architectural Representation I (AR323A)
- Architectural History II (AR 4185)
- Media Workshop

Spring
- Architectural Design II (AR318)
- Architectural Representation II (AR323B)
- Architectural History I (AR4284)
- Environmental Systems I (AR4286)
- Media Workshop

Year 2
Fall
- Architectural Design III (AR419)
- Structures I (AR447A)
- Building Systems (AR346)
- Architectural or General elective
- Media Workshop

Spring
- Architectural Design IV (AR511)
- Structures II (AR447B)
- Environmental Systems II (AR449)
- History/Theory Elective

Year 3
Fall
- Architectural Design V (AR512)
- Advanced Building Systems (AR586C)
- History/Theory Elective
- Architectural or General Elective

Spring
- Architectural Design VI (AR511)
- Design Thinking (AR586D)
- Professional Practice (AR646)
- Architectural or General Elective

Year 4
Fall
- Degree Project (AR616)
- Urban Issues Elective
- Architectural or General Elective

105 total credits
MArch 2+ Program

Year 1

Fall
- Architectural Design III (AR419)
- Environmental Systems I (AR438)
- Structures I (AR 447)
- History / Theory Elective
- Media Workshop

Spring
- Architectural Design IV (AR511)
- Structures II (AR547B)
- Environmental Systems II (AR499)
- Architectural or General Elective
- Architectural Workshop

Year 2

Fall
- Architectural Design V (AR512)
- Advanced Building Systems (AR588C)
- History / Theory Elective
- Architectural or General Elective
- Architectural Workshop

Spring
- Architectural Design VI (AR611)
- Design Thinking (AR550)
- History/ Theory Elective
- Architectural or General Elective

Year 3

Fall
- Degree Project (AR616)
- Professional Practice (AR646)
- Urban Issues Elective

75 total credits

* or substitute one 3 credit General Elective
MLA Program

Year I
First Semester
- Fall
  - Ecology + Digital Workshop (A48.501)
  - Landscape Architecture Design Studio + Earth Workshop (A48.501)
  - Plants + Environment (A48.451)
  - Landform (A48.461)
  - Digital Representation II (A48.521-L)
  - History of Landscape Architecture I (A48.570)
- Spring
  - Landscape Architecture Design Studio (A48.452)
  - Planting Design (A48.542-A)
  - Landscape Materials (A48.462)
  - Principles of Ecology (A48.551)
  - Landscape Technology (A48.465)
  - History/ Theory of Landscape Architecture III (A48.572)
  - Electives*

Year II
First Semester
- Fall
  - Landscape Architecture Options Studio (A48.601)
  - History/ Theory of Landscape Architecture III (A48.572)
  - Electives*
- Spring
  - Landscape Architecture, Urban Design, or Architecture Options Studio (A48.602)
  - Electives*

* Electives must include a minimum of 6 units in natural systems; and 3 units in professional practice. These courses must be approved by the program office.

Total Credits: 60 credits minimum
# Dual Degree MArc 3 + MUD

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
</table>
| Year 1 | Architectural Design I (AR317)  
Concepts and Principles (AR339)  
Architectural History II (AR 4885)  
Media Workshop | Architectural Design II (AR318)  
Architectural Representation I (AR323A)  
Building Systems (AR346)  
Media Workshop | Metropolitan Urban Design (ART14)  
Degree Project (AR516)  
Professional Practice (AR526)  
Architectural or General Elective |
| Year 2 | Architectural Design III (AR419)  
Environmental Systems I (AR438)  
Structures I (AR447A)  
Architectural or General Elective  
Media Workshop | Architectural Design IV (AR511)  
Structures II (AR447B)  
Environmental Systems II (AR449)  
History/Theory Elective  
Elements of Urban Design (ART11)  
Metropolitan Landscapes (AR654D)  
Advanced Building Systems (AR655C)  
Metropolitan Development (AR656H)  
Metropolitan Design Elements (ART13)  
Metropolitan Urbanism (AR656)  
MUD Track Elective  
Urban Issues Elective | Metropolitan Urban Design (ART14)  
Design Thinking (ART850)  
Architectural or General Elective  
MUD Track Elective |
| Year 3 | Elements of Urban Design (ART11)  
Metropolitan Landscapes (AR654D)  
Advanced Building Systems (AR655C)  
Metropolitan Development (AR656H) | Metropolitan Design Elements (ART13)  
Metropolitan Urbanism (AR656)  
MUD Track Elective  
Urban Issues Elective | Metropolitan Urban Design (ART14)  
Architectural Design VII (AR611)  
Design Thinking (ART850)  
Architectural or General Elective  
MUD Track Elective |
| Year 4 | Metropolitan Urban Design (ART14) | Metropolitan Urban Design (ART14)  
Architectural Design VII (AR611)  
Design Thinking (ART850)  
Architectural or General Elective  
MUD Track Elective | Metropolitan Urban Design (ART14)  
Architectural Design VII (AR611)  
Design Thinking (ART850)  
Architectural or General Elective  
MUD Track Elective |

126 total credits
Dual Degree
MArch 2 + & MUD

Year 1
fall
Architectural Design III (AR419)
Environmental Systems I (AR438)
Structures I (AR447A)
Architectural or General Elective
Media Workshop

spring
Architectural Design IV (AR511)
Structures II (AR547B)
Environmental Systems II (AR449)
History/Theory Elective
Architectural Workshop

Year 2
fall
Elements of Urban Design (AR711)
Metropolitan Landscapes (AR654D)
Advanced Building Systems (AR655C)
Metropolitan Development (AR652H)

spring
Metropolitan Design Elements (AR715)
Metropolitan Urbanism (AR656C)
MUD Elective
Architectural or General Elective

summer
Metropolitan Urban Design (AR714)

Year 3
fall
Architectural Design VII (AR611)
Design Thinking (AR580)
MUD Elective
Urban Issues Elective
Architectural Workshop

spring
Degree Project (AR616)
Professional Practice (AR626)
Architectural or General Elective

96 total credits
MArch 2 & MUD
dual degree program

Year 1
- Fall:
  - Architectural Design IV (AR511)
  - Structures I (AR)
  - Environmental Systems I (AR458)
  - History Theory Elective

- Spring:
  - Architectural Design V (AR512)
  - Structures II (AR348)
  - Environmental Systems II (AR449)
  - Architectural or General Elective

Year 2
- Fall:
  - Elements of Urban Design (AR711)
  - Metropolitan Landscapes (AR654D)
  - Metropolitan Development (AR652H)
  - Advanced Building Systems (AR538C)
  - Metropolitan Design Elements (AR713)
  - Design Thinking (AR646)
  - Metropolitan Urbanism (AR649)
  - MUD Track Elective

- Spring:
  - Metropolitan Urban Design (AR714)

- Summer:
  - Metropolitan Urban Design (AR714)

Year 3
- Fall:
  - Degree Project (AR616)
  - Professional Practice (AR646)
  - MUD Track Elective
  - Architectural or General Elective

81 total credits
Graduate semesters abroad are offered in the summer in Barcelona, Spain, and Shanghai; in the fall in Buenos Aires, Argentina and Seoul, South Korea; and in the spring in Helsinki, Finland. These programs are taught by local architects who are also members of our faculty. In each spring and fall location, students undertake a full semester's worth of work or 15 credits. The summer studio and seminar in Barcelona offers a maximum of 9 units of credit. Students in all these programs share apartments.

MArch 2 students may take one semester or a summer abroad; they must spend a semester in St. Louis before they embark on these travels. MArch 3 students may take a maximum of two semesters, or one semester and a summer abroad upon completion of the three semester core studio curriculum. All graduate students must spend their final semester in St. Louis to pursue their degree project.

Students who are interested in spending time in these countries should work with their advisors and plan their academic work carefully. To assist with this, graphs have been prepared to show how curriculum can be worked out for semesters abroad.
### MArch 3 Program

#### Study Abroad

**Barcelona**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Architectural History II (AR4283)</td>
<td>Media Workshop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Architectural Design II (AR318)</td>
<td>Architectural Representation II (AR323B)</td>
<td>Environmental Systems I (AR438)</td>
</tr>
<tr>
<td></td>
<td>Architectural History I (AR4282)</td>
<td>Media Workshop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structures I (AR447A) (summer)</td>
<td>Structures II (AR447B) (summer)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Architectural Design III (AR419)</td>
<td>Building Systems (AR450)</td>
<td>History/Theory Elective</td>
</tr>
<tr>
<td></td>
<td>Architectural or General Elective</td>
<td>Media Workshop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Architectural Design IV (AR511)</td>
<td>Environmental Systems II (AR439)</td>
<td>Urban Issue Elective</td>
</tr>
<tr>
<td></td>
<td>Architectural or General Elective</td>
<td>Architectural Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Architectural Design V (AR512)</td>
<td>History/Theory Elective</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Architectural Design VI (AR611)</td>
<td>Design Thinking (AR580)</td>
</tr>
<tr>
<td></td>
<td>Advanced Building Systems (AR580C)</td>
<td>Architectural or General Elective</td>
</tr>
<tr>
<td></td>
<td>Degree Project (AR616)</td>
<td>Professional Practice (AR646)</td>
</tr>
<tr>
<td></td>
<td>Architectural or General Elective</td>
<td></td>
</tr>
</tbody>
</table>

105 total credits
MArch 3 Program
Study Abroad
Helsinki & Barcelona

Year 1
fall
Architectural Design I (AR317)
Concepts and Principles (AR339)
Architectural Representation I (AR323A)
Architectural History II (AR 4883)
Media Workshop

spring
Architectural Design II (AR318)
Architectural Representation II (AR323B)
Architectural History I (AR4282)
Environmental Systems I (AR438)
Media Workshop

summer
Structures I (AR44TA) (summer)
Structures II (AR447B) (summer)

Year 2
fall
Architectural Design III (AR419)
Building Systems (AR346)
Urban Issues Elective
Architectural or General Elective
Media Workshop

spring semester
Architectural Design IV (AR411)
Environmental Systems II (AR439)
History/Theory Elective
Architectural or General Elective

summer
Architectural Design V (AR512)
History/Theory Elective

Year 3
fall
Architectural Design VI (AR611)
Design Thinking (AR580)
Advanced Building Systems (AR538C)
Architectural or General Elective

spring
Degree Project (AR616)
Professional Practice (AR646)
Architectural or General Elective

105 total credits
**MArch 3 Program**  
**Study Abroad**  
**Helsinki & Buenos Aires**

<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Architectural Design I (AR317)
- Concepts and Principles (AR339)
- Architectural Representation I (AR323A)
- Architectural History I (AR 4283)
- Media Workshop

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Architectural Design II (AR318)
- Architectural Representation II (AR323B)
- Architectural History II (AR4284)
- Environmental Systems I (AR438)
- Media Workshop

<table>
<thead>
<tr>
<th>Year 3</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Architectural Design III (AR419)
- Structures I (AR447A)
- Building Systems (AR546)
- Architectural or General Elective
- Media Workshop

<table>
<thead>
<tr>
<th>Year 4</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Architectural Design IV (AR511)
- Environmental Systems II (AR439)
- History/Theory Elective
- Architectural or General Elective

- Degree Project
- Professional Practice
- Architectural or General Elective

105 total credits

*If Building Systems II (AR347) is taken twice, then the second course, Technology (AR460), will count towards general elective requirements*
MArch 3 Program
Study Abroad
Barcelona & Buenos Aires

Year 1
Fall
Architectural Design I (ARB17)
Concepts and Principles (ARB9)
Architectural Representation I (ARB3A)
Architectural History II (ARB45)
Media Workshop

Spring
Architectural Design II (ARB18)
Architectural Representation II (ARB3B)
Architectural History I (ARB45)
Environmental Systems I (ARB46)
Media Workshop

Summer
Structures I (ARB47A) (summer)
Structures II (ARB47B) (summer)

Year 2
Fall
Architectural Design III (ARB19)
Building Systems (ARB36)
Architectural or General Elective
Media Workshop

Spring
Architectural Design IV (ARB21)
Design Thinking (ARB80)
Environmental Systems II (ARB49)
Architectural or General Elective

Summer
Barcelona
Architectural Design V (ARB22)
History/Theory Elective

Year 3
Fall
Barcelona
Architectural Design VI (ARB24)
Advanced Building Systems (ARB38)
Urban Issues Elective
History/Theory Elective
Degree Project (ARB26)
Professional Practice (ARB44)
Architectural or General Elective

Buenos Aires
105 total credits
MArch 2 Program
Study Abroad
Barcelona

Year 1

fall
- Architectural Design IV (AR511)
- Environmental Systems I (AR459)
- History/Theory Elective
- Architectural or General Elective

spring
- Architectural Design V (AR512)
- Structures II (AR447B)
- Environmental Systems II (AR439)
- Architectural or General Elective

summer
- Architectural Design VI (AR611)
- History/Theory Elective

Barcelona

Year 2

fall
- Design Thinking (AR580)
- Advanced Building Systems (AR538C)
- Professional Practice (AR616)
- Urban Issues Elective
- Architectural or General Elective

spring
- Degree Project (AR616)

60 total credits
<table>
<thead>
<tr>
<th>Year 1</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buenos Aires</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architectural Design IV (AR511)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Systems I (AR438)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>History/Theory Elective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architectural or General Elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buenos Aires</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architectural Design V (AR512)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Design Thinking (AR580)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Systems II (AR439)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Architectural or General Elective</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2</th>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

60 total credits
MArch 2 Program
Study Abroad
Helsinki

Year 1
Fall
Architectural Design IV (AR511)
Environmental Systems I (AR548)
History/Theory Elective
Architectural or General Elective

Spring
Architectural Design V (AR512)
Environmental Systems II (AR449)
History/Theory Elective
Architectural or General Elective

Year 2
Fall
Architectural Design VI (AR611)
Design Thinking (AR580)
Advanced Building Systems (AR538C)
Urban Issues Elective
Degree Project (AR616)

Spring
Structures II (AR447B)
Professional Practice (AR 646)
Architectural or General Elective

60 total credits
<table>
<thead>
<tr>
<th>Year 1</th>
<th></th>
<th>Year 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fall</strong></td>
<td>Architectural Design IV (AR511)</td>
<td>Architectural Design VI (AR611)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Systems I (AR438)</td>
<td>Advanced Building Systems (AR538C)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>History/Theory Elective</td>
<td>History/Theory Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Architectural or General Elective</td>
<td>Urban Issues Elective</td>
<td></td>
</tr>
<tr>
<td><strong>Spring</strong></td>
<td>Architectural Design V (AR512)</td>
<td>Degree Project (AR616)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Design Thinking (AR580)</td>
<td>Professional Practice (AR646)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Environmental Systems II (AR439)</td>
<td>Architectural or General Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Structures II (AR646)</td>
<td>Architectural or General Elective</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Architectural or General Elective</td>
<td></td>
</tr>
</tbody>
</table>

- **Total Credits:** 60
GUIDELINES FOR COMPREHENSIVE OPTIONS STUDIOS

The role of the Comprehensive Options Studio is to expand the students’ abilities from an abstract design language to a tactile material engagement. The focus of the studio should be strong design experimentation that is implemented in a highly resolved architectural project. Students must develop structure and material systems, as well as appropriate design responses to climate and energy use demonstrated through plans, interior and exterior elevations, models, building and wall sections at appropriate scales up to ¼” scale. This should provide the process and skills which will allow for expanded development in the Degree Project.
Masons Learning Latin: An Architecture Museum in Grand Center

(Comprehensive Studio)

“An architect is a mason who has learned Latin.”
-Adolf Loos (1930)

Project Description

1. “Radical developments [in architecture] have never emerged from a tabula rasa condition, and innovators from Palladio to Koolhaas have always worked from a deep engagement with the culture of architecture.”
-Adam Caruso, “Towards an Ontology of Construction”

How can an unapologetically contemporary architectural imagination address historical cultural monuments to produce compelling buildings? Although facile historicism and slavish preservation may have left a bad taste in the mouths of many architects, the last decade has seen a range of innovative contemporary practices engage directly with historic buildings. These include the many projects of Herzog & de Meuron (Tate Modern [2000] to the Elbe Philharmonic [2012]) and David Chipperfield’s Mies van der Rohe-winning Neues Museum (2010). Never one to be left behind, AMO and Rem Koolhaas’s Cronoacas at the Venice Architecture Biennale and the New Museum (2010) seeks to theorize the threatening “radical stasis” of preservation.

St. Louis’s solid stock of empty or underutilized early twentieth-century buildings begs to be reimagined as part of a living urban fabric. Often these buildings are on important civic sites and are constructed of materials that would not be typically available for new construction. Beginning with both historical research and spatial explorations, this studio will examine how existing and new can merge conceptually, spatially and materially to form a complex, dynamic whole.

2. “There is little need for museums of architecture if the architecture of museums can do the job and do it better.”
How best can architecture itself become the subject of cultural display to address its historical development and current trajectories? Fragments, casts, models, drawings, books, period rooms, replicas and entire buildings all constitute artifacts which have been collected and curated by and as architectural museums. While the origins of the architectural museum are typically traced to Sir John Soane’s own house in London (c. 1800) and Alexandre Lenoir’s Musée des Monuments Français in Paris (c. 1791-1816), new curatorial agendas have recently emerged around architectural themes. Barry Bergdoll, chief curator of architecture and design at MoMA, is moving the department away from the style forecasting role and developing “activist exhibitions” that act as incubators for curators, historians, architects and the general public to engage in contemporary debates and experimental research relevant to the culture of architecture and of cities. Elsewhere, Kurt W. Foster has suggested that the best way to exhibit architecture is not the white cube of the gallery space, but the museum building itself.

A lesser known aspect of the Jefferson National Expansion Memorial is the unrealized Museum of American Architecture, which would have housed, among other things, artifacts salvaged from the demolition for the arch grounds. None other than Sigfried Giedion in his Space, Time and Architecture wrote about the cast iron architecture along the St Louis riverfront, citing its influence on early skyscraper design. Although materials for this potential museum are lost, many such artifacts still exist regionally, including those in the Building Arts Foundation collection in Sauget IL and the Louis Sullivan collection at Southern Illinois University. By examining both strategies of architectural display and local architectural archives, this studio will engage with architecture both as subject and object, consciously foregrounding historical and contemporary themes to explore some of the many ways architectural narratives can be constructed.

Two last points about the studio: first, students will be required to work largely with large three-dimensional physical models during the semester. Second, there will be an optional studio trip during spring break to Berlin, where we will visit many buildings which address the themes presented in this studio.
Architectural development and the forces that drive it tend to promote ever-increasing levels of protection. In many ways buildings have become more and more representative of a form of control, especially control over the natural conditions that frame our daily lives. To promote a sense of control over the uncontrollable, many architectural works disassociate the solution from the natural and physical conditions affecting it. Roofs are made flat because the architecture should be more powerful than the little raindrops that fall on it. Windows recede into slots as the recognition of spending time to view something is lost. Rooms become fow as we further erase moments from the sweep of time. Is there a way to work with this challenge, to connect directly to the physical?

Our studio will focus upon creating places of connection and relevance by focusing on human conditions for living. This will be carried out by evaluating new environments for those people who must contend with cancer care. It is not a cancer treatment center. Instead, it is a post-cancer facility for those who have completed or are completing cancer treatment at another facility. The project will be small in size, no larger than about 4000 square feet. It will be located in St. Louis. The small scale of the project will allow us to more carefully examine the project at many levels.

Cancer is not a scientific problem. The high potential for discomfort and death that cancer creates forces a re-evaluation of what architecture can do for the living. This is an important component of the disease, especially during the current state of elevated disassociation and pacing in our lives. Architecture that contends with cancer is not a problem of contending with death, it is a challenge of the living, making it suitable for reconsidering architectural goals. Cancer care includes physical as well as psychological challenges not dissimilar to those most people face every day except at a heightened level, it is a valuable program for understanding immediacy in architecture. The project is not about cancer though, it is about life. It is not about the medical and physiological components of cancer, it is about inevitability and physical connection to a place.

We will work in a similar manner to the methods used in our office at Snøhetta. We will also discuss the design process as it relates to the practice of architecture in the wider sphere of practice, beyond the classroom. Ultimately we will find a solution together that is rewarding, provocative and relevant to our time.
ARCH 500/600 ARCHITECTURAL DESIGN V-VI
John Hoal, Associate Professor
Oliver Schulze, Visiting Professor

The Lively Studio
Imagine the Los Angeles You Want; Observe the Los Angeles You Get.

(Urban Design Studio)

What is public life?
The magic of the city is choice, especially opportunities for “being in public”, that is, enjoying a variety of social and cultural activities, accomplishing the necessities of everyday life, and generally “being alive in the city.”

Providing people with access to stimulating and lively urban environments is an important prerequisite for a high quality of life in cities. A lively city is a city in which the urban economy will continue to flourish, and where environmentally sustainable structures will still be culturally relevant to future generations.

The 2012 Spring Semester will focus on exploring established and new ways of observing urban life as a starting point from which to shape design proposals for urban environments.

South Park DNA
Studying urban quality requires documenting and analyzing a complex array of data. Successful evidence-based design relies on rigorous method to enable the preparation and careful execution of surveys. The quality and nature of the information collated will set the context of the way in which data can be used to understand, compare and benchmark aspects of urban quality and how it may inform the design of proposed physical changes and consequential transformations in use by people.

Students will survey the public life in the Los Angeles Special Entertainment District (LASED) and the surrounding South Park District. Students in the studio will practice essential skills to align the transformation of physical urban infrastructure with our changing expectations towards urban life today.

Expected Learning Outcomes
1. Observe existing urban life and map urban quality
2. Plan for additional public life and high quality of life
3. Develop area strategies based on urban quality
4. Connect urban life and urban form through design
There has been much discussion about a Health Care reform in the US and the way health care services are provided in this country. Beyond the notion of service and the cost of health care we are proposing to rethink some of the architectural parameters of health care institutions. This studio seeks design concepts for a small, environmentally conscious, patient and family oriented Medical office Building (MOB) in St Louis.

It was not until the beginning of the 20th century that physicians began to locate their offices above a bank or retail store or, in larger cities, in multi-use office buildings. By the beginning of World War II, a number of specialized buildings had been erected exclusively for use by physicians, including some on hospital campuses.

The end of the war, however, brought rapid change. The thousands of physicians discharged from military service tended to locate their practices near their patients, in the newly booming suburbs. But soon, changing neighborhoods, increasing traffic congestion, and the centralization of healthcare delivery around hospitals caused a growing increase in the construction of hospital-based medical office buildings.

Most of these buildings were owned by the hospital and financed with low-cost, tax-exempt bond issues. In the 1970s, however, federal tax policy that favored real estate investments, high inflation that devalued many other investments and growing physicians’ incomes caused the medical staffs of many hospitals to lobby hospitals for ownership of these buildings. Many buildings were owned by partnerships of physicians or physician-hospital joint ventures.

In the 1980s, a new set of economic forces caused hospitals to begin turning to third parties to develop and own their medical office buildings. Regulations restricting the use of tax-exempt financing, prospective payment regulations and Medicare fraud and abuse guidelines made
it expensive and risky for hospitals to own or joint venture the ownership of medical office buildings with physicians. -Robert A. Rosenthal, AIA

The medical office building will offer comprehensive and convenient medical, diagnostic and treatment services in one location. It houses medical practices along with laboratory, vascular, cardiology and imaging services.

The project will also feature a Health Resource Center where patients, families and the community can access or review educational materials on many health conditions and treatments. The Center offers a comprehensive research setting to help patients understand the specifics of a disease and any proposed treatment for it.

The integrated Health Resource Center is staffed by a community resource nurse, who assists members of the community locate disease-specific information through videos, books, journals and online resources. This service is offered to support patients in becoming educated and active participants in their own health care.

It is proposed to also include a small Community Center with a state-of-the-art meeting facility with the latest in audio/visual equipment. It is a place for groups both large and small to gather for meetings, social events, educational activities and more. The room comfortably seats up to 80 people and features an adjacent outdoor patio. Many educational programs are offered here free to the public.

Design Parameters:

Ca. 75,000 sq ft (gross)
Site location in St Louis
Program and adjacency/stacking diagrams will be provided

Schedule will be provided at the beginning of the semester. The studio will include a brief site analysis, program evaluation and case study phase as well as a non-mandatory one week workshop in Los Angeles around mid-term.

It is anticipated that we will bring in experts in the field of Health Care to support and provide valuable information to the studio.
ARCH 500/600 ARCHITECTURAL DESIGN V-VI
Derek Hoeferlin, Assistant Professor

Operation “Gutter to Gulf” Phase 4
Occupy South Louisiana

“Elevation Is the Salvation from Inundation”
– Windell Curole, South Lafourche Parish Levee Director

Believe it...this will be a capital “A” Architecture studio.
Architecture will adaptively occupy south Louisiana: an EXTREME landscape of cultures, ecologies, economies, hydraulics, hydrologies, infrastructures, resources and urbanisms. Like other global deltas and their dependent urbanisms, North America’s economies significantly depend on the strategic sites and situations that New Orleans and the mouth of the Mississippi River hold.

More than six years after Hurricane Katrina, New Orleans and its environs continue to act as a crucible for dilemmas about landscape design, contemporary urbanism, regional ecology, but not really architecture. Architecture itself has been relatively absent in the conversation of how architecture can adaptively integrate within these contexts, rather than rely on status quo solutions. Located between the Mississippi River and Lake Pontchartrain, this metropolis is a watery landscape. It includes not only the densely inhabited center of New Orleans but also the suburban and rural areas of multiple parishes (counties). This metropolitan region has been radically transformed over the last century by engineering for urbanization, industry, and commerce, and the unexpected consequences of these changes have created a fragile, flood-prone landscape that was once all at or above sea level. But now due to human intervention with pumping and drainage that has caused the city’s soil to dry up, much has sunk to below sea level.

Our specific EXTREME landscape within this delta urbanism is in the yonder of 77 square miles. Or about 49,280 acres. Or about 2,146,636,800 square feet. That’s big. But its external forces are even bigger—geo-politics, changing climates, rising tides, sinking lands, flooding rivers, disappearing wetlands, tropical storms, resource exploitations, oil spills. It is a landscape that the United States Army Corps of Engineers defines as the “St. Bernard Polder.”

Gutter to Gulf studies water as a way into the design of urban landscapes. Water raises design issues that are rhetorical—what, for instance, should the image of water be in a soggy place,
and how can that image help citizens to come to terms with where they live?—and practical—how does rainwater hit the ground, travel through the city, and make its way to the Gulf of Mexico? These issues cross disciplines and arenas: they engage architecture, urban and landscape design, planning, engineering, economics, and politics. They involve landscape types from public infrastructure to civic space to private houses and gardens. They demand reckoning with ecological systems from regional to residential scales. The first 3 phases developed 1) tangible examples of how water might transform the everyday landscapes of New Orleans; 2) investigated the workings of the system that carries water through the city; and, 3) transformed water infrastructure systems into civic space. This phase redefines the context of architecture, landscape and urban design work: it will consider the city as part of a region, and it will examine the EXTREME gradient of metropolitan landscape systems from densely urbanized New Orleans to the wetlands and Gulf of Mexico.

This phase will build upon previous GTG’s base information and proposals, but in NO way will duplicate the previous work. The St. Bernard Polder is not only uncharted territory for GTG (for instance engaging the Lower Ninth Ward and the wetlands) but this design studio possibly has never been done, based on its relation to previous GTG studios, its international collaborative aspect, and, how the polder is intrinsically tied to (or maybe cut off from) New Orleans. We front-load the semester by working directly with our Toronto counterparts.

We will convene in New Orleans from February 4-9. Cost of travel (that will require vehicles on site), accommodation, food, sazeracs, etc. is responsibility of each student. We will bring our initial models and will field document selected sites within the St. Bernard Polder. We will conduct this work with our Toronto counterparts and engage many local experts of multiple disciplines. We will stay at a lovely courtyard-style hotel in the French Quarter that’s a stone’s throw away from Café du Monde and Bourbon Street. Believe me, crucial to being in New Orleans is to understand its truly unique cultural landscape.

Following the field trip, we will continue our work with Toronto and have weekly conference calls to jointly move the work forward. Due to their schedule, they will be ahead of us since they finish their term in mid-April. However this is a good thing because Toronto will be able to continue to set the landscape themes for us to better understand how to build within as architects.

p.s. some say the New Orleans design problem is “already done.” That couldn’t be further from the truth. This is just the beginning. Let’s be clear about one thing. This is not about Katrina. She’s definitely “done.”
Interstitial Landscapes

(Comprehensive Studio)

Goals
The main goals of this comprehensive studio is to embrace design as the interface between architecture, city, and landscape manifested in urban public spaces; to understand the relationship between cultural and historical heritage and contemporary society through a curatorial project; and to explore different forms of drawing representation.

Site and design hypothesis
Students are invited to study and respond to one of the world’s most renowned public spaces, the Piazza degli Uffizi, in Florence, Italy, aiming to create a City Museum connecting the plaza and the right bank of the Arno river and to promote the understanding the city’s urban and architectural history and mainly its restructuring as an European metropolis in the 21st century.

The design hypothesis and proposal aim to develop complementary design strategies combining the understanding and delimitation of site, approach to urban, landscape and architectural elements (both historic and new), consideration of public access and circulation, spatial sequencing, material and environmental conditions and constraints.

The historical Uffizi building should not be affected by the project. While the plaza and belvedere must remain visually open, the area along the riverbank may be occupied with new elements connected to the City Museum, extending the existing belvedere and offering a second access point from the street, but without obstructing the uses of and access to the existing rowing club on the riverbank.

This studio embraces Florence’s unique history not as a static legacy from the past but as a dynamic contemporary phenomenon. Design, research and representation assignments will nurture the museum not as the traditional depository of a collection, but as a dynamic center for the study of the coexistence between the past, the present, and the future of the city. The center should work in tandem with Historical and Topographical Museum of Florence, also known as Firenze Com’era, which is currently being moved to Palazzo Vecchio on the nearby Piazza della Signoria.
The current proposal intends to offer an alternative for articulating different discourses about collective and public initiatives and for making them more visible and present in the life of the city. This hypothesis of study and project complements and expands the purpose of the Historical and Topographical Museum of Florence, also known as Firenze Com’era (Florence as it used to be), which is currently being moved to Palazzo Vecchio on the nearby Piazza della Signoria.

Program
This design program is informed by recent efforts in other European cities that have developed similar centers such as, for example, the Arsenal Pavilion and the Cité de l’Architecture et du Patrimoine in Paris, the Casa dos 24 in Oporto, the NAi in Rotterdam, and the ARCAM in Amsterdam.

The City Museum should serve as a point of encounter for citizens and visitors alike. It should provide a forum for the debate between the simultaneous efforts of historic, territorial, and environmental preservation and the promotion of innovative studies and projects to deal with contemporary, everyday spatial and social processes and urban and architectural challenges. The basic program should address the following activities and audiences:

- Permanent display (timeline and 2D/3D objects, physical and digital displays); temporary pedagogical exhibition gallery;
- Conference room for meetings, debates, lectures; staff office and front desk; public restrooms; museum bookshop / café; Arno river bank in association to the Canoeing Club.

Method
Design studio activities will focus on survey and project development and will take place in tandem with research activities dedicated to readings lectures, sketching documentation. Combined research and design assignments offer a unique opportunity to consider complementary design scales and important topics faced by contemporary designers in a contained set of exercises.

The semester will be divided into complementary modules, including the study of basic aspects of the urban and architectural history of Florence through readings and presentations; the production of individual timelines representing that study; the study of spaces of display and the development of a curatorial project for the museum; and the development of the design proposal for the City Museum at Piazza degli Uffizi ranging from its relationship to the cityscape and the Arno River to the representation of material, technical and experiential qualities of each individual proposal.
Global Features: Monte Carlo Revisited

“A strange world is beckoning, which will depend upon an awareness of what environment can be generated within the brain, and perhaps the old, tactile/tangible environment become the dream.”

Archigram 9, 1970

Project Description

In this last issue of the iconic Archigram magazine, a powerful metaphor of the environment is portrayed – a concept of the environment as a cultural and mental construct, as a personal and collective dream. Perhaps a reflection on the overall state of architecture in the early 1970s, these words could also be read as a reflection on one of Archigram’s most iconic, yet probably also most enigmatic projects – Features: Monte Carlo. In 1969, the Archigram Group entered a competition to design a multi-functional entertainment and recreational space in the city of Monte Carlo, Monaco. The project was a landscape proposal that engaged the ground and the sea through a combination of under- and above-ground spatial features. The project went through various iterations and as it was nearing the construction phase, it prompted the Archigram Group to formally establish their architectural practice. Ultimately, the project fell through, resulting in the dispersal of the Archigram members around the world, yet they continued to collaborate over great distances, sustaining a dialogue of ideas through mail and other forms of media exchange.

This studio will revisit Archigram’s working model of delayed conversation, engaging in a critical dialogue through beautifully crafted drawings and artifacts. These visual resources will serve as vehicles to critique each other’s work and to engage in an international dialogue about the critical questions raised by Archigram’s Monte Carlo project. By illuminating these questions from the contemporary perspective, students will be challenged to think about the idea of the environment on a global scale, addressing it as a cultural, social and technological construct.

Furthermore, the city was founded on the merger of health-related bathing treatments and the lucrative entertainment industry. In order to sustain this dialogue with context and specificity, the studio will engage the historical program of the city of Monte Carlo – a place of multiple cultural facets, where local Italian, French and Occitan cultures blend with a truly global diaspora. Through a series of iterations and conversations, the projects
will evolve into a series of spaces and events of *cleansing* and *entertainment*. While these two types of activities are emblematic of Monte Carlo’s complex history, they also engage broader dichotomies of contemporary environments around the world – literal/metaphorical, health/amusement, and physical/ephemeral – allowing each project to develop unique combinations of public events. The projects will progress from domestic to environmental scale, operating simultaneously on personal, communal and overall systematic levels.

The studio will bring together graduate and undergraduate students in an ambience of collaborative conversation. The studio will also engage in an international dialogue, including Dennis Crompton, one of the founding members of the Archigram Group, and other voices from around the world. As part of this studio, there will be an optional field trip to Monte Carlo for the purposes of a workshop and site visit.
A MONTESSORI SCHOOL: Space And Learning In Contemporary Elementary Education
(Comprehensive Studio)

"Verum Ipsum Factum" (we only know what we make).
– Giambattista Vico

"Learning by doing it oneself, learning that is self-chosen and founded upon individual interest [leads to] the development of a complete human being, oriented to the environment, and adapted to his or her time, place and culture."
– Maria Montessori

Project Description
The architecture studio program will engage the design of a small Montessori School. Rather than with the formal program and site, as is typical, the studio will begin with two projects, each approximately two and one-half weeks in length, both of which are to some degree inspired by the thoughts on carving of the art and architecture critic Adrian Stokes. The first project, entitled “Carving the Classroom: Abstract CUBE,” is intentionally abstract (meaning “to draw from”), and will involve each student constructing a highly resolved proposal for a single Montessori classroom, engaging the Froebel gifts and their underlying geometries as ordering concepts, as well as engaging the fundamentally spatial definition of the Montessori education of “learning though making.” During this first exercise, the studio will visit a local Montessori school. The second project, entitled “Etching the Earth: Concrete DATUM,” is intentionally concrete (meaning “to grow together”), and will involve each student evolving a highly resolved spatial proposal, deploying the programmatic elements of the Montessori School to construct a “society of spaces” as an inhabited surface, allowing a re-conceptualization of the ground plane. Following these two initiatory projects, which allow each student to develop and construct an idealized Montessori classroom and school (the “poetics of human action”), the site for the school will be given, to be developed over the remaining ten weeks of the semester. This final project will involve bringing the building design to a high level of resolution, and, as is appropriate to the “tectonic culture” of Modern architecture, students will be asked to resolve “the poetics of construction” of their design, developing the materials,
construction, and details that will shape the interior experience of the school’s inhabitants—the ultimate measure of the quality of any work of architecture.

**Studio Resources and Optional Field Trip**

The work of the studio will be supported by seminar discussions and required readings to provide the necessary understanding of both Montessori education and the tradition of shared ordering principles between art and architecture. The book, *Space and Learning*, by the Dutch architect Herman Hertzberger (who has designed over 30 schools, many of them Montessori), will serve as the studio required textbook. This will be supplemented by readings from writings of Maria Montessori and Paula Polk Lillard on the Montessori method, and David Chipperfield, Peter Zumthor, Michael Bendift, Juhani Pallasmaa, Kenneth Frampton, Jose Ortega y Gasset, Paul Klee, Josef Albers, Adrian Stokes, John Berger, Aldo van Eyck, Colin Rowe and Robert Slutzky, among others. As an integral part of this studio, the professor will lead a non-required, optional field trip to the Netherlands during a portion of spring break (March 10-18). During this trip, students will visit a number of Montessori schools, with a tour lead by their architect, Herman Hertzberger, whose wife Johanna is the former head Montessori teacher in Holland. Students will also have the opportunity to visit works by architects such as H. P. Berlage, Willem Dudok, Gerrit Rietveld, Johannes Duiker, Aldo van Eyck, Wiel Arets, MVRDV, Mecanoo, West 8, OMA, etc.

**Studio Structure**

This architecture studio will work in parallel with an art seminar, to be taught by the sculptor Robert Gero. The combined classes will meet together at least once a week in a dedicated classroom, and will pursue a variety of parallel exercises, centered on the subject of Montessori education and its precursors (Froebel kindergarten training) and offspring (Reggio Emilia elementary education). It is anticipated that there will be numerous opportunities for constructing joint pedagogical events and exercises during the semester. All students will be introduced to the “tradition” of architects and artists sharing concepts of space, order and perception, as identified by Jose Ortega y Gasset, Paul Klee, Josef Albers, Adrian Stokes, John Berger, Aldo van Eyck, Colin Rowe and Robert Slutzky, among many others, and the two faculty will lead weekly discussions on this and other related subjects.
This studio will investigate a recent interest in rethinking parking structures as a new kind of civic space for the 21st century. Though we still tend to see parking structures as non-objects in the urban context, we are beginning to see architecturally significant parking structures emerge in contemporary practice. As the etymology suggests, parking structures were originally understood either as purely utilitarian shelters devoid of architectural content or as a fenced-off non-objects. However, as architects, planners, and developers, started to realize in the mid 20th century that cars were starting to dominate urbanization, some interesting examples started to emerge speculating on more productive ways to think about parking. This has culminated recently in the well publicized
project by Herzog & De Meuron at 1111 Lincoln Road, Miami. The spectacular success of this project has encouraged many cities to start rethinking the architectural possibilities of parking structures. In addition to these recent projects, we will look at the most interesting examples of parking structures from the past century (many of them will surprise you), and develop projects that privilege the parking structure as a significant architectural object.

Since parking structures are, in essence, an uninterrupted extension of the ground coiled into a building, we can think of the parking structure as occupying a vague condition in-between surface and volume. In addition, the elimination of enclosure (slabs without exterior cladding) makes the relationship between inside and outside indeterminate. In this regard, we will extend this geometric and spatial ambiguity into a consideration of what might be in-between landscape and building; public and private. The site for this project will be on the southern edge of Forest Park in St. Louis. The proposed parking structure will interface between the fast movement of the highway and the slow movement of the landscape, integrating leisure programs and park services. Though parking is usually thought of as the minor adjunct of enclosed program (enclosed program with some parking), we will think of this project as the reverse (parking with some enclosed program).
Material Agencies

Material Agencies explores architectural fabrication through a programmed process of material formation. Materiality will be understood not as a passive, homogeneous condition but rather as an arrangement of active matter that incorporates varied degrees of intensity. Properties such as stiffness, thickness or density will operate locally, heterogeneously distributed, and work towards the expression of an emergent whole that arises from the assemblage of simple but affectively collaborating parts.

A post-tensioned assemblage will be fabricated at 1:1 that hybridises numerous structural and material properties/qualities to generate an installation whose spatial, structural, formal and ornamental character is intrinsic to the forces and organisational strategies embedded within its materials, fabrication and assemblage. Material Agencies explores the compression of design and assemblage within a bottom-up organisation of matter in order to create emergent architectural affects that range from the rigid to the supple, the sharp to the smooth.

The installation

The 1:1 installation size, location and purpose will be determined during the course of the semester and will be largely defined through the design research undertaken in the studio. The systemic approach to tectonic prototyping undertaken early in the semester will facilitate in narrowing the scope and brief of the installation to one appropriate to the materials, production time-frame and budget constraints of the studio. The installation emphasis will be to demonstrate the active role designed material organisations can have as generative tectonic formations in architectural design.
schedule
The studio is structured into three phases of development; experiments into design systems, followed by the hybridisation of these into design proposals and culminating in the fabrication and assembly of a 1:1 installation.

These three phases will operate within the following schedule:

**design systems**
1:50 - 1:5 and 1:1 scale models of different techniques/strategies for:
structure and spatial/formal arrangements
casting prototypes of componentry

**design proposals**
hybridisation of techniques into scaled model design proposals
production system concept - for fabrication of parts
1:1 scale prototypes of partial assemblies and detailed design
digital design unwrapped set-out organisations designed through
agent behaviours

**installation**
ongoing 1:1 scale prototypes and further detail design
fabrication
assembly of installation

**structure**
Due to the productive and collaborative nature of the studio, we will work in teams during most of the semester. Assuming specialised individually creative roles within the group work, participates will also undertake some assessment items individually. The first phase we will work in pairs, followed by work in larger teams of four for the subsequent two phases.

**key words**
emergent, self-organisation, material-organisation, behaviour

**key structural techniques**
compression arching, ridging, post-tensioning, suspension, cable-net

**key material techniques**
variable stiffness, variable thickness, vectorial aggregation, bifurcating, converging, overlapping, inter-locking, loose-fit, folding, bending, creasing, draping
BUILDING WILD: PLACING SECURITY IN A FLUID SYSTEM
(Landscape Studio)

“The idea of nature contains, though often unnoticed, an extraordinary amount of human history.”
- Raymond Williams

In his essay “Walking,” Thoreau proclaims that in “wilderness is the preservation of the world,” the go-to polemical quote often invoked by environmental groups to support a separation between the “human and non-human, the unnatural and the natural, the fallen and the unfallen.” But, what is wilderness today (and what should it be)? An inaccessible Other? An idealized sanctuary only achievable when humans completely remove themselves from the equation?

**wil·der·ness**

- a tract or region uncultivated and uninhabited by human beings
- an area essentially undisturbed by human activity together with its naturally developed life community
- an empty or pathless area or region
- a part of a garden devoted to wild growth
- obsolete : wild or uncultivated state

Or, is it possible that this commonly accepted definition of wilderness no longer exists; that wildness may be a more fitting descriptor – a word that suggests ‘wild’ can come in degrees?
This studio will explore the architectural implications of ‘wildness’ in a landscape that in recent years has been re-branded as “the Working Coast.” Though still largely uninhabited, the marshes of south Louisiana are no longer Thoreau’s “pristine wilderness” and, given the surgical approach to oil, gas, and fish extraction, are perhaps much more akin to the feedlots of the Midwest than an environmentalist’s Eden.

We will dispense with extreme definitions that polarize ‘built environment’ and ‘nature,’ and instead design for a middle ground at the extreme edges, where commerce, collection, and extraction cannot be separated from the environmental shifts of Louisiana’s Gulf Coast. To that end, the studio will explore design opportunities for volatile landscapes using transformations of two distinct architectural typologies, museums and banks.

In the first project, we will examine mythic Nature: wildness as a collectible item (memory, souvenir; talisman) in need of curated space. But unlike traditional collections (which feature picturesque, static narratives), our explorations will focus on the dynamism inherent in wildness. This project will culminate in an installation in St. Louis.

In the second project, we will look at commodified nature: wildness as a tradable good, something with value that can be extracted, secured, and exchanged, a bankable space. But with a valuable resource, especially one that is necessarily ‘a place’ as much as it is ‘a good,’ boundaries, controlled access, and systems of exchange become important design questions. In this project, students will develop design proposals that apply land banking to a 400-acre site: a regressive beach chenier complex that serves as the last remaining land buffer for Port Fourchon, the state’s oil and gas gateway, and Bayou Lafourche, home to much of the state’s shrimping industry. Proposals will bring together interpretations of the iconic architectural typology of the bank (as both space and system) with the wildness of the marsh.
ARCH 616 DEGREE PROJECT
Adrián Luchini, Raymond E. Maritz Professor
Kathryn Dean, JoAnna Stolaroff Cotsen Professor
Ben Fehrmann, Senior Lecturer
Eric Hoffman, Senior Lecturer
Philip Holden, Senior Lecturer
Sung Ho Kim, Associate Professor

AMBITION, MODE, POTENTIAL, EXPERIENCE, TECTONIC, ARCHITECTURE:

Course Description:
In Degree Project Studio you have the opportunity to express your own ambitions, frame your own method of design exploration, and develop an experiential and tectonic basis for manifesting your intentions—to create, not only an advanced work of architecture, but the emotional and intellectual space in which to work as an architect.

Your work in this studio is based on the product of the preceding Design Thinking degree project preparation course—an individually initiated programmatic, intentional, and situational project outline.

You will develop an independent critical position on the making of architecture in the world, advance an aspiring conceptual design, and elaborate and synthesize all aspects of the project—formal, spatial, experiential, organizational, structural, and technical—and finally create a clear, full, and persuasive presentation focused on telling a critical project story. Projects will include the development of program spaces and relationships, development of structural and environmental systems, building envelope systems, life-safety issues, sustainability strategies, and technical construction sections and assemblies.

Project Description
As determined, described, and approved in Design Thinking.

Course Goals
In addition to the goals listed in the Course Description, each student is to aspire to a high level of critical thinking, developing a project that is exploratory, projective, or unexpected in some important way in the realm of architecture beyond the exigencies of the project outline. A student’s ability to work independently is encouraged and tested.
### COURSE LISTINGS

#### INTRO TO DESIGN PROCESSES I

This is the first semester of a two-semester sequence that includes both two-dimensional and three-dimensional work each semester. Two-dimensional work includes freehand drawing, various methods of representation of form and space, graphic design, and layout. Three-dimensional work includes issues of problem definition, problem solving, materials, structure, fracture, spatial relationships, and systematic processes of design. Students will alternate between two- and three-dimensional work and develop connections between them. Same as F20 211, Section 01.

- **A46 111 ARCH**
  - 3 units
  - 01 TuTh 8:00p-8:00p
  - Karlen

#### INTRO TO DESIGN PROCESSES II

This is the second semester of a two-semester sequence that includes both two-dimensional and three-dimensional work each semester. Two-dimensional work includes freehand drawing, various methods of representation of form and space, graphic design, and layout. Three-dimensional work includes issues of problem definition, problem solving, materials, structure, fracture, spatial relationships and systematic processes of design. Concurrent registration in ARCH 112A required for architecture students. Non-architecture students must receive permission of the Associate Dean of the School of Architecture.

- **A46 112 ARCH**
  - 3 units
  - 01 MW 9:00a-12:00p
  - Tracy

#### INTRO TO DESIGN PROCESSES IV

Studio which initiates architectural and building issues such as: building analysis, structure, organizational systems, and programming. Prereq: Arch 211 and concurrent registration in Arch 212A.

- **A46 212 ARCH**
  - 3 units
  - 01 MW 2:00p-5:00p
  - Tracy

#### ISSUES IN DESIGN II

Lectures presenting design concepts that form the focus of exercises presented in Arch 212. Prereq: Satisfactory completion of Arch 211A or permission of the Dean of the School of Architecture.

- **A46 212A ARCH**
  - 1 unit
  - 01 M 1:00p-2:00p
  - Tracy

#### COMMUNITY DYNAMICS

This course builds on the investigations of Arch 121, Community Building, Building Community, and concentrates on the connections between place-based economic, political, and social dynamics. In order to ground discussions in reality, the class will immerse itself in the urban laboratory of St. Louis while relating local issues to broader trends. The course is organized using the Community-Based Teaching and Learning methodology and will be centered around the first phase of an multi-year inquiry into the potential of design to improve the reality and perception of public safety through targeted projects. Students will assemble relevant research on applicable design techniques, brief project partners in the Mayor's Office of the City of St. Louis, work with representatives of the St. Louis Metropolitan Police Department to define focus areas, and assess the applicability of design strategies to specific focus areas. Architecture 241 is divided into a lecture/discussion session on Thursday and a lab section on Friday. The lab section will be divided between independent research and bi-monthly facilitated meetings with city representatives.

- **A46 241 ARCH**
  - 3 units
  - 01 Th 1:00p-4:00p
  - Faulkner
  - Subsections:
    - A F 12:00p-1:00p
    - Faulkner
INDEPENDENT STUDY
Prereq: Sponsorship by an instructor and permission of the Dean of the School of Architecture. Each independent study must be approved by the end of the first week of classes.
1 unit

AR STATUS
All students majoring in the architecture program but are not enrolling in a regularly scheduled design studio should register for this course as an audit for internal use of the School.
0 units

ARCHITECTURAL DESIGN II/IV
Prerequisite: Satisfactory completion of Arch 311. Twelve hours of studio work a week
01 MWF 1:30p-5:30p
Fraser
Fulton
Heyda/Yates
Lest
Marjanovic
Naucas
6 units

ARCHITECTURAL DESIGN II (M.Arch. 3)
The second of a three-semester sequence of core design studios. Continues examination of issues raised in Arch 317. Prereq: M.Arch.3 students only. Students enrolled in this studio are also required to enroll in A46 408B, Digital Visualization Workshop: Advanced 3-D Modeling.
01 MWF 1:30p-5:30p
Freixas
Moyano
Mueller
Yogiaman
6 units

ARCHITECTURAL REPRESENTATION II (UNDERGRADUATE)
Representation is the means by which architectural form, space, and ideas are explored, conveyed and studied. This course is intended to bring a fundamental understanding of the capacity and possibility for representation to affect the process and outcome of the architectural endeavor. While it is expected that students will gain proficiency and knowledge of a broad range of techniques and convention, greatest emphasis will be placed on the ability to recognize how, when, and why different representational means are appropriately employed at various points in the design process, and to easily move between them. The course will work simultaneously with both the convenience of known elements and the exploration of unknown or ‘envisioned’ concepts and spaces.
01 TuTh 2:30p-5:30p
Kim
McFadden
Sivakumar
Zhang
3 units
ARCHITECTURAL REPRESENTATION II (M.ARCH 3) A46 323B ARCH

The course examines the practice of representation, specifically the systems of drawing used in architecture. The objective is to develop the requisite discipline, accuracy, and visual intelligence to conceptualize and generate a relationship between space and form. We will see that, rather than a translation of reality, representation operates between perception and cognition as a transcription of reality and is a powerful instrument in the design and making of architecture. The relationship between the drawing forms and the tools used to produce them are brought into focus as manual, digital, photographic and physical applications driven by drawing intentions. Emphasis is on participation and excessive absences will be noted. PLEASE NOTE: The second half of the semester will focus on computing, for which each student is required to have a laptop computer. 3 units

01 TuTh 2:30p-5:30p    Dolci
Smith
Tessmer
Yogiaman

DIGITAL FABRICATIONS A46 326G ARCH

A primer in the use of computers in art and design, this course will focus on fabrications both real and virtual. The ubiquity of computers in design, studio art, communications, construction, and fabrication demand that professionals become comfortable with their use. It is also important in a group of ever-specializing fields that one know how to translate between different software and output platforms. This comfort and the ability to translate between platforms allow contemporary artists and designers to fabricate with ever-increasing freedom and precision. This course will introduce students to 3D software with a focus on 2D, 3D, and physical output. Through a series of projects, students will learn to generate work directly from the computer and translate it into different types of output. Starting from first principles, this course will cover the basics from interface to output for each platform used. The course will be broken into three projects. In the first project, students will focus on computer-generated geometry and control systems. In the second part, students will generate physical output and line drawings. The final project will focus on rendering, cinematic effects and video. The software covered in this course includes, but is not limited to: Rhinoceros 3D, Maya, Illustrator, Photoshop, and Adobe Aftereffects. Additionally, students will use the 3D printer, laser cutter, and other digital output tools. This course welcomes students from other disciplines, both graduate and undergraduate. 3 units

01 Tu 6:00p-9:00p    Booth

ARCHITECTURAL HISTORY I: ANTIQUITY TO THE ENLIGHTENMENT A46 3286 ARCH

This course addresses the development of architecture and urbanism from Greco-Roman antiquity to the European Enlightenment, while also paying close attention to contemporary developments in the non-Western world, especially in the Islamic world and East Asia. The course's objective is to set the stage for major ideological pursuits of modern architecture as they developed in the 19th and 20th centuries, examining how these ideas evolved out of longer-term historical processes. We will focus on issues of classicism, tectonic culture, and historicity, and discuss commonalities and differences toward them across time and cultures in the premodern world. 3 units

01 TuTh 10:00a-11:30a    Kuan
BIOMIMICRY: A BIOKINETIC APPROACH TO SUSTAINABLE DESIGN

There is a conceptual similarity between the way an organism and a building engage their respective environments. A biological system responds to the unique condition of its ecosystem; architecture responds to the unique conditions of the site. Building on this principle are the fields of biomimicry, the study of design and process in nature, and bioenergetics, the study of movement within organisms, and their ability to address architectural problems with elegant, technologically advanced, sustainable solutions. Biomimicry: A Biokinetic Approach to Sustain(Able) Design focuses on kinetics as an essential element of biomimicry in the context of architecture and employs the study of the kinetic aspects of biological systems - structure, function, and movement - to inform the design and engineering of buildings. A systematic approach to researching and translating the kinetic function of organisms leads to a successful bridging of biological and architectural concepts.

3 units

01  W 9:00a-12:00p Freixas

BUILDING SYSTEMS I

This course is for Undergraduates only. The course progresses from a survey of the physical and structural properties of building materials through an analysis of building assemblies and systems. Structural systems are examined relative to their performance characteristics and issues related to manufacturing and construction. Structural systems in wood, steel and concrete along with masonry systems are reviewed in this class. Additionally, the primary and secondary performance characteristics of enclosure systems are identified and analyzed. This course also covers the design of egress systems and vertical transportation systems in buildings. Though the course focuses primarily on the underlying principles associated with these building systems, industry standards and building code requirements are an integral part of the review.

3 units

01  MF 10:00a-12:00p Hoffman

BUILDING SYSTEMS II

3 units.

SECT 01: Available only to students participating in the Helsinki International Program

01  TBA Priman

STL CITY STUDIO PROGRAMMING: UNDERSTANDING, ENGAGING, AND ORGANIZING COLUMBUS SQUARE CITIZENRY

This class will dedicate itself to designing programs for future community projects in the Columbus Square neighborhood. Programming will occur organically through understanding, engaging, and organizing the neighborhood. These projects are to be cross-disciplinary, not limited to any particular practice or discipline. They will be realized in future semesters (or in certain cases, this semester) through the support of STL City Studio. The class builds on relationships established during last year’s City Studio design-build project, Learning Landscapes at Patrick Henry Elementary School, a series of gardens at the center of the neighborhood. To define and develop projects, we will use narrative to clarify both our own values and the values of the neighborhood. Students will regularly visit Columbus Square and its adjacencies, particularly Downtown St Louis, uncovering visible and invisible stories. We will listen to what residents, officials, experts, and planners have to tell us about the place and what the place could become. Throughout the semester, students will present their findings through narratives, diagrams, and other representations. Projects will emerge out of this collaborative, narrative-based process. All students, from any discipline or at any level, may take this class.

3 units

01  Th 1:00p-4:00p Fulton
INDEPENDENT STUDY
A46 382 ARCH
Prereq: Sponsorship by an instructor and permission of the Dean of the School of Architecture. Each independent study must be approved by the end of the first week of classes. Credit variable, max 5 units
** See start of this departmental entry or contact department directly for details on faculty/sections and enrollment.

MEASURED REPRESENTATION
A46 402A ARCH
This course proposes to investigate and create a series of measured drawings. The drawings, as architectural objects, configure architectural knowledge, perception and vision. We will begin by studying precedent drawings in relation to each architect’s theoretical framework, project description and technique. The range of works will relate different types of construction (perspectives, axonometrics, diagrams, ideagrams, assemblages, montages, descriptive geometry, and mapping) with integral and symbiotic theoretical agendas. Each student will learn the techniques of representation in their case study and from this example construct an interpretation of a specified site in this language. With a collection of theoretical frameworks and workshops on various techniques, the class will qualify a series of sites through drawing/interpreting the shadows present. Shadows may be thought of as reductions of the real object - in this sense, the drawings will act as abstractions or reductions that promote vision. Instead of simply discussing qualities of space, narratives of metaphor, intangible phenomena, implications of constructed geometry, this architectural research project attempts to propose methods of seeing such that the representation may play a more active role in the shaping of design. This course centers on the creation of imaginative processes of representation. 3 units
01  M 9:00a-12:00p    Woofter

ADVANCING INTEGRATED SUSTAINABILITY
A46 404 ARCH
This course welcomes students from all disciplines in the university. Students will learn to apply and integrate into the built environment a holistic range of social, economic and technical systems inspired and optimized by models in the natural world. A foundation in natural and bio-mimetic systems will be overlaid with analysis of corporate mission, principles, and triple bottom line thinking in order to learn how to build defensible, value-based arguments for implementation of well-designed sustainable systems. With the expressed intent of achieving net positive outcomes for advancing integrated sustainability in the built environment, the following topics will be addressed: the eco-structure, atmosphere, water, food, materials and shelter, energy, transportation, culture, health, education, governance, commerce, and public outreach. Lectures, case studies, readings, and discussions will support real-world application exercises. Complementing leading edge theory with practical outcomes will be provided with the intention that students will develop valuable skills to be incorporated in their other academic projects as well as their future employment pursuits. 3 units
01  Tu 9:00a-11:30a    T. Gaidis
Lorberbaum
I think it is very hard to design a 'beautiful table': it does not depend simply on the tools and materials one uses, it also depends on a subtle, fragile and uncertain sagacity which, sometimes, somebody—who know how and who knows why—manages to channel into the design: the total perception of our cosmic adventure, as fleeting, ineffable and incomprehensible as it may be.” -Sotsass. We will be designing and building (wood) tables. This will be our vehicle both for exploring design principles and for acquiring (or refining) wood working skills. I focus on tables specifically because, intrinsically, so few demands are placed on them. Almost anything is, or can be, a table. Any horizontal surface held up by some support can qualify as “table”. If that is the case, the issue of “designing a table” precipitates the demand of exploring “why” or “what table”. What does “table” mean? What makes the (your) table matter? Is the table site specific or generic, use specific or general? This is essentially a wood working class. Other materials may be used in supportive roles (brackets, screws, etc.) but your proposals will be primarily the product of explorations of the qualities of wood and the development of your wood working skills. The rational here is simple. Our shop is primarily a wood shop. The unique characteristic of this design course is that the final product is not a representation of a proposal, it is the proposal. The first half of the semester will be devoted to design proposals and critiques, the second half of the semester will be dedicated to the production of your table and it’s documentation in graphic form. It is expected that you will have some familiarity with the use of basic shop equipment. An introduction in the use of the shop is not part of this course although the shop offers an introductory course for those who would profit from it. Because the implications of the production of a piece of furniture are different than the production of a building, furniture design has often allowed for freer more open exploration. It is expected that your design explorations will be guided by “a point of view” and/or an explicitly defined set of explorations. We are in the business of producing beautiful environments, spaces and objects. This course is specifically about designing and making a beautiful object that is born of a set of intentions and has meaning beyond the fact that you made it. Lab, materials fee: $50.00. 3 units

FURNITURE DESIGN IN FINLAND
This course is taught in Helsinki as part of the Study Abroad Program. 3 units

DIGITAL VISUALIZATION WORKSHOP: ADVANCED 3-D MODELING
This workshop is an introduction to complex digital modeling in RHINO 4.0 with basic NURBS Surface, Poly Surface, Solids, and Plug-in T-Spline for Subdivision modeling techniques. These skills are needed for Rapid proto-typing outputs such as 3D Printing and CNC Milling. The workshop will introduce students to layer and object organization with file size management allowing complex and detail modeling. Required for all 318 students. 1 unit

1/17/12 - 5/18/12
01 Sa 10:00a-12:00p  MoFadden
02 Sa 2:00p-4:00p  MoFadden
03 Su 2:00p-4:00p  MoFadden
A46 408H ARCH

T^3://TECHNOLOGY.TODAY.TOMORROW

The design industry is changing and the need to understand this change is critical. Before you graduate, you should make yourself aware of the way technology is impacting the process of delivering projects today and tomorrow. This evening workshop will expose you to various technologies within different parts of the building industry. We will review technology used in design and construction with special guests, from leaders in the industry demonstrating how they are using these tools today. We will explore technology on the horizon and hear from those developing tools for the future. This workshop is not meant to be a software instruction class, but more of a window into the profession.

#BIM #technology #future #AEC #design #construction #cloud #knowledge #parametric #computation #collaboration

1 unit

SECT 01: This workshop will meet on Tuesday, February 7, 14, 21, 28, March 6, 20, and 27, 2012.

01 Tu 6:00p-8:00p Howard

A46 409C ARCH

WATERCOLOR PAINTING FOR ARCHITECTS, URBAN DESIGNERS & LANDSCAPE ARCHITECTS

This class will introduce students to different techniques of watercolor painting. The class will focus on teaching students the basics of material selection (paint colors, brushes, various papers), proper paint blending/mixing techniques, creation of unique color palettes, and both smooth wash techniques and painterly brush effects. Students will learn to render site plans of their own project work. There will also be an optional afternoon of pure sketching with paint. One objective is to teach students the methods to create beautiful renderings so that they may choose to apply the techniques to their final studio illustrative work (at the discretion of the student). Grades will be based upon class participation, effort, and final watercolors.

1 unit

SECT 01: This workshop will meet on Saturday, February 18, 25, March 3, 10 and 24.

01 Sa 10:00a-11:30a Gaidis
02 Sa 12:30p-1:00p Gaidis
03 Sa 2:30p-4:00p Gaidis

A46 425D ARCH

MESO-AMERICAN ARCHITECTURE

The first half of the course will trace the major civilizations of central Mexico from 1800 BC until the Spanish conquest after 1400 AD, focusing on developments in architecture and landscape, calendars and cosmology, ceramics, the ballgame and sacrificial rituals, gods, myths and legends, language and hieroglyphics, and political, religious, and social organization. The survey will feature detailed and extended tours of specific sites by means of drawings, maps, slides, and digital images, we may even attempt a couple of virtual tours on-line. In the second half we will deal with the Mayan area, ranging from the lowland jungles of Chiapas and Yucatan to the Peten and the highlands of Belize and Guatemala. High points include the Jaguar dynasty of Yaxchilan, the reign of Pacal at the hybrid site of Palenque, and the demise of 18 Rabbit in the city of Copan, Honduras. Tikal will be featured as the culmination of Mayan culture, and the Chenes, Rio Bec and Puuc styles will also be examined. See a complete and independent cultural development going back at least 7000 years, and equal in greatness to Egypt, Greece, or Rome. This is also a chance to examine civilizations existing at the margins of ecology and sustainability, and how they may at times succumb when the limits have been reached. Students will be encouraged to focus on a particular area of interest for further inquiry, to be developed into a paper or a project. Fulfills the History/Theory elective requirement.

3 units

01 Tu 6:00p-9:00p Kultermann
ARCHITECTURAL HISTORY I: ANTIQUITY TO THE ENLIGHTENMENT  
A46 4286 ARCH

This course addresses the development of architecture and urbanism from Greco-Roman antiquity to the European Enlightenment, while also paying close attention to contemporary developments in the non-Western world, especially in the Islamic world and East Asia. The course's objective is to set the stage for major ideological pursuits of modern architecture as they developed in the 19th and 20th centuries, examining how these ideas evolved out of longer-term historical processes. We will focus on issues of classicism, tectonic culture, and historicity, and discuss commonalities and differences toward them across time and cultures in the premodern world.

3 units
01 TuTh 10:00a-11:30a
Kuan

SPECIAL TOPICS: BEYOND WORDS, BEYOND IMAGES: REPRESENTATION AFTER HISTORY  
A46 430D ARCH

Beyond Words, Beyond Images: Representation After History examines strategies of representation, performativity, inscription and presence in face of historical, cultural and personal memories and in the context of evolving technologies. Contemporary artists discussed in this seminar invite us into uncharted territories of spatialisation, temporality, projection, trauma, trace, witnessing and the body's re-presentation, and include among others, Christian Boltanski, Tacita Dean, Bracha Ettinger, Mona Hatoum, Emily Jacor, Alfredo Jaar, Isaac Julien, Mary Kelly, Silvia Kolobowska, Ana Mendieta, and Krzysztof Wodiczko. The seminar discusses thematic and conceptual underpinnings pervading their work and ways in which contemporary artists contribute to global cultural discourse through negotiating the dislocating effects of social and private experience in the late capitalist and postcolonial Western world, with its neo-colonial consequences. Those practices, in turn, offer opportunities to question and displace the Cartesian subject of modernism. Ephemeral, kinetic, sonic, spatial, architectural, textual and performative projects will be produced in this seminar. Individual research and writing will be supported by readings and discussion of selected postcolonial and feminist theories pertaining to strategies undertaken by artists today. This seminar is open to graduate students in art and architecture interested in augmenting and expanding their understanding of relationships between meaning, representation, architecture, language, memory and history.

Same as home course F20 ART 430D.
3 units
01 Th 8:00p-10:00p
Weiss

DECODING SUSTAINABILITY  
A46 434R ARCH

This course engages worldwide conversations regarding current global environmental issues in relation to the production of building materials. Students will begin by defining dilemmas faced by designers and architects in the selection of materials, followed by introductory information on Biomimicry, Natural Capitalism, True Cost, and Life Cycle Analysis. This course will then look at national, international and industry environmental standards that govern building materials with respect to the triple bottom line: environmental impact, economic impact and social equity. By analyzing specific "certified" building materials, students will see how much or how little is being measured and how transparent the certification processes are. Building materials and the environmental standards that govern them will continue to evolve throughout the entirety of a designer's life. Therefore, developing a thinking/filtering process to employ in the selection will aid each designer in their career. This course seeks to develop design thinking in relation to the environment while developing tools to understand how building materials can be evaluated for sustainability.

3 units
01 TuTh 11:30a-1:00p
Roth
ENVIRONMENTAL SYSTEMS I  A46  438  ARCH
This course outlines and addresses fundamental passive strategies that can be employed to both respond to, and maximize, the possibilities of specific climates and contexts - to enable building form to work with, not against, those ground and environmental conditions. A proactive engagement of the environment at both the scale of the body (Micro) and the scale of the building (Macro) will be outlined, establishing base strategies and rules of thumb for fundamentally integrating passive systems to balance human comfort and sustainable strategies, toward an enduring architectural response. 3 units
01 TuTh 1:00p-2:30p  Cruse

ENVIRONMENTAL SYSTEMS II  A46  439  ARCH
We as architects have to analyze and address complex issues and relationships, synthesize them, and then make them manifest through clear design strategies. Building systems must reconcile: solar heat gain, glare control, daylight levels, thermal insulation, ventilation, acoustics, air quality, structure and fabrication - all in relation to the scale and comfort of the human body. The development of environmental systems into a clear, comprehensive, and elegant design solution cannot be an afterthought; it must be a synthesized and integral part of the design process, with a clear strategy that operates at multiple scales. Building upon the passive strategies explored in Environmental Systems I, this course will lay the foundation for the integration of active environmental systems with enclosure, space, and the requirements for human occupation. This will be done through the study of climate, air, temperature, water, light, sound, and energy. Each topic will be assessed against problems, principles, possibilities and potential. This course focuses on how important it is to consider active systems as part of an integrated design strategy addressing both FORM and PERFORMANCE throughout the design process. Prereq: Environmental Systems I & Building Systems I 3 units
01 TuTh 1:00p-2:30p  Montgomery
Discussion sections:
A  Th 8:30a-10:00a
B  Th 12:00p-1:30p
C  Th 4:30p-6:00p

STRUCTURES II  A46  448A  ARCH
Continuation of Arch 447A with consideration of the effects of forces on structural members of various materials. Intro to the design of structural members in steel, reinforced concrete and wood. Prereq: Arch 447A  3 units.
01 W 6:30p-9:00p  Shinn

TOKYO: DESTRUCTION & RENEWAL OF JAPAN'S CAPITAL  A46  452H  ARCH
Tokyo was leveled twice over the course of the 20th century, first by the Great Kanto Earthquake in 1923 and in the final months of World War II. One of the world's largest and most technologically advanced cities, Tokyo is also an agglomeration of neighborhoods and still manifests the unique heritage of its Edo-past. In this seminar, we will examine themes of continuity and change, local and global, through these cycles of destruction and renewal. In addition to the built environment, we will also incorporate other visual and artistic media, such as literature and film. Enrollment in the course does not require prior knowledge of Tokyo or the history of modern Japan. Fulfills History/Theory elective requirement. 3 units
01 W 9:00a-12:00p  Kuan
PATTERN RECOGNITION
A46 462M ARCH
Interrogates a recent history of architecture replete with pattern. Case studies of patterning in contemporary projects will be undertaken through the production of analytical, computational models to reveal an underlying logic of performance and construction. In parallel, the course will present a theoretical survey of related issues in art, psychology, computation, and ecology. In this context, pattern will be understood as a performative expression of an ecological system, distinct from historical issues of ornament and representations. Informed by the analysis, students will then digitally produce an original pattern, both graphically operative and spatially materialized.

01  Tu 6:00p-9:00p  Colopy
3 units

ARCHITECTURE & PHOTOGRAPHY
A46 464A ARCH
Seminar that deals with issues raised by use of photography by architects, historians, and critics. Seminar will confront the assumption that our knowledge of notable buildings and architectural space is based primarily on the photographic image. Photographs are tacitly accepted as objective facts, and the pervasiveness of photography in magazines, books, and exhibits as substitute for direct experiences are rarely questioned. Goal of seminar: to foster a healthy skepticism of photographs, and to investigate the role of photography as a means of record and convey complex spatial conditions by the ordering conventions of the frame. While not technical, the course will introduce students to technical aspects of photography that are particularly relevant to architectural photography: parallax, lighting, lens distortion, depth of field, format and grain, cropping, photomontage, and point of view. Fulfills History/Theory requirement. 3 units

01  W 9:00a-12:00p  Leet

EXTREME ARCHITECTURE
A46 470E ARCH
Imagine living on an oil rig, or in a submarine, or at the South Pole. What have we designed as places of habitation in these extreme environments? What can these extreme living conditions teach us about new ways of surviving (even thriving) in these environments, about new enabling technologies, and the evolution of habitation and settlement in general? The increasingly broad scope of human endeavor and exploration takes us into some very unusual environments and challenging conditions. Unexpected and surprising concepts will be found hidden in these esoteric arenas. Think of marine, polar, submarine, or subterranean exploration (or exploitation), and the research-rich areas of military and defense programs, or programs for lunar and extra-terrestrial exploration. Likewise, think of the design intelligence that has been applied to the more common supports of modern life: air transportation, sea travel, recreational shelter, the trucking industry, mobile and emergency housing, and many others. The tradition of visionary thought in architecture is well established and will be investigated during the course of the semester. However, our focus goes beyond those speculative propositions, to the actual experimentation and implementation being carried on today -- often outside the domain of formal architecture. This course seeks to uncover the array of concepts, contexts and conditions where the most original thinking about living in unconventional situations is taking place, literally making new places for people. We will examine some of the ideas, methods and places already in play for sustaining human occupancy in extreme conditions, particularly those that have required highly specialized and novel design responses. There we will find existing and developing infrastructures for habitation that seldom enter the realm of conventional practice, either because they are considered too exotic and extreme, or too marginal. Yet by investigating these very active trajectories of design and creativity, we open rich sources for inspiration and real promise of architectural innovation.

01  P 9:00a-12:00p  Fraser
3 units
MID-CENTURY MODERNISM IN ST. LOUIS 1930-1965

St. Louis is home to many significant architectural works of Mid-Century Modernism, design by local, national, and international architects of great repute. One of the most powerful ways to understand and appreciate architecture is to experience it firsthand. In this course, we will tour significant extant works after brief presentations of the design architect's work by the course lecturers or visiting lecturers. In addition to site visits, the course will involve architects and historians (to the greatest extent possible) who have firsthand knowledge and experiences of Mid-Century Modernism of St. Louis through lectures and site visits, culminating in a round table discussion with the class able to ask questions after a semester of exploration, discovery and focused investigation. Each week, students will document their observations of each site visit through writing, photography, sketching, diagramming concepts, and additional research of the architecture, architect or historical context. A private blog site will be created to post information and assignments so that all in the class may read and contribute to the body of research being developed. Also, each student will be expected to research a topic of their choice from a list of 20 or so buildings selected by the instructors. This semester project will culminate in a thirty-minute class presentation and subsequent discussion. Ultimately, the weekly and semester projects will be documented in an 8.5" x 11" format to be incorporated into a booklet documenting the student’s cumulative efforts. Fulfills History/Theory elective requirement. 3 units

01  Tu 1:00p-4:00p Guenther
       Raimist

MAPPING THE METROPOLITAN MISSISSIPPI

This seminar explores the relationship of city to river through reading, recording, and mapping. Students will document their research, create proposals, and develop simulations and/or prototypes for a site on the St. Louis riverfront. Methods of inquiry will combine hand-recording, photography, GIS techniques and DIY devices. The course will alternate discussion sessions, field research, and lab. Open to all graduate students; undergraduates require the instructor’s approval. Same as home course A48 LAND 480B. 3 units

01  Th 9:00a-12:00p Yates

INDEPENDENT STUDY

Prereq: Sponsorship by an instructor and permission of the Dean of the School of Architecture. Each independent study must be approved by the end of the first week of classes. Credit variable, max 9 units ** See start of this departmental entry or contact department directly for details on faculty/sections and enrollment. 3 units
This course will allow students to work collaboratively to develop a comprehensive body of work (including presentation boards, physical models, and animated digital graphics) in response to a design challenge in a yet to be disclosed major metropolitan city in the United States. The general design criteria will be based on a forthcoming program in association with the 2012 NOMA National Student Design competition. During the first half of the semester, there will be an optional overnight field trip to the city to visit the site and gather other information relevant to the project. Students will work collectively to develop thorough schematic level solutions. After the midterm review, the class will develop highly detailed plans, elevations, sections, details, 3D views (animation optional), cultural, sustainable, and accessibility design concepts. Not only will this activity culminate into a final review, but the students will submit and formally present their design solution at the National NOMA Conference to be held next year in the fall of 2012. Ultimately, the course will be crafted in such a way that the time/work demands on students will not compromise their core studio and class responsibilities. The students will be competing against at least 15 design teams from other nationally respected universities. A cash award will be given to the top 4 team finalists (note: Washington University participated for the first time in 2009 and placed 3rd in the national competition; beating out teams from Cornell U. and Georgia Tech). The National Organization of Minority Architects (NOMA) is a 38-year old organization that has worked collaboratively with the American Institute of Architects (AIA) to further diversity awareness in academia and the design profession, and encourages the inclusion of all students to participate in all of its student and professional activities. Open to both undergraduate and graduate students. Each student interested in the class must submit $55, which covers the NOMA membership fee. There will be other expenses throughout the semester associated with travel and project materials.

3 units

01  Tu 1:00p-4:00p  Brown

This seminar focuses on new ways of thinking about American architecture in the postwar period, to develop new conceptual frameworks to better understand American architecture in the postwar years in its larger context of social, political, and urbanistic change. Unlike a history survey course, it will not only focus on the canonical works of well-known designers such as Mies van der Rohe or Louis Kahn, but will also situate such work within the various new spatial, technological and social directions of the postwar era. It will begin by examining how American architecture changed from the neo-classical and arts and crafts inspired directions of the prewar years into the more fragmented and complex situation after 1945. This course will also consider the complicated ways that American cities in that period were transformed from dense, street-car based industrial environments into sprawling suburban metro areas, typically also becoming racially divided in this process. It will also look at some of the complexities within modern architecture itself, some of which developed directly into postmodernism. These included important innovations in spatial organization, environmental planning, and new building technologies, as well as fundamental changes in landscape design, campus design and public school design which have since become part of mainstream practice. Important changes in building technology in this era, which have also tended to be undervalued in the shadow of later concerns about building imagery, will also be addressed. Open to graduate students and advanced undergraduates in architecture, art, art history, and history. Prereq: A46 4284 Architectural History II, or equivalent course taken elsewhere. Fulfills History/Theory elective requirement.

3 units

01  W 9:00a-12:00p  Mumford

2 units

01  W 12:00p-1:30p  Lorberbaum
EXPLORE & CONTRIBUTE: COLLABORATION BETWEEN WASHINGTON UNIVERSITY & HENRY ELEMENTARY SCHOOL A46 490A ARCH

Principal Esperansa Veal of Henry Elementary School is creating a remarkable place for her students who live in the neighborhood of the Cochran Gardens Federal Housing Project in downtown St. Louis. Principal Veal is clear in her conviction to provide each of her students with both literal and academic nourishment, and is working unceasingly to make the Henry School a safe and creative oasis for children ages pre-school through grade six. Her goal is to have the Henry Elementary School students explore sustainable ways to live during the 21st century. To this end we will emphasize ecological sustainability, environmental health, personal responsibility, leadership and a comprehensive, high quality academic program. With an emphasis on the environmental sciences, energy alternatives and conservation, recycling, organic gardening and the food sciences, and the emerging ‘green’ economy, students will focus on developing the math, science, writing, and hands-on skills that will make them successful leaders to make a difference in improving the environment for humanity. This course invites undergraduate and graduate students from different fields of study to apply their discipline to the goal of designing and teaching hands-on problem-solving projects for students at the Henry Elementary St. Louis Public School, located across the street from Cochran Gardens Housing, at 1220 N. 10th Street. Gay Lorberbaum, with advising from Principal Veal, will work individually with each WU student to develop the right fit between the creative contribution each WU student wants to offer and the vision Principal Veal has for each age group of students at Henry Elementary School. Students enrolled in this course will work on-site at Henry Elementary School during the scheduled meeting times. 3 units

SECT 01: This section will meet at the Henry Elementary School during its scheduled meeting time.
01  M 9:30a-11:00a    Lorberbaum

COMMUNITY DEVELOPMENT & AMERICAN CITIES A46 5079 ARCH

Registration Information: Enrollment in this course is limited to 14 Social Work students and 14 Architecture students. To ensure that balance, all students must initially join the waitlist to enroll in this course. Registrars will persistently check the waitlist and add the correct number of students from each School to the course roster, based on order of joining the waitlist. Both Architecture and Social Work begin registration at the same time. Waitlisted courses do not count toward your total credit total, so are not subject to the 16 credit WebStac registration limit for Social Work students Course Description: Throughout recent American history there has been considerable attention paid to the distinct problems of poverty of place, of poor rural regions and poor neighborhoods in large cities. In part this concern reflects the realities of American politics. Political representation is local, reflecting the votes of residents of neighborhoods and regions, not interest groups. The goal of this course is to analyze and suggest interventions that improve the quality of life of poor Americans by improving their neighborhoods. Primary focus will be on alleviating urban poverty. The course will begin with a comprehensive introduction to strategies to redevelop distressed urban neighborhoods in America. Attention will be paid to strategies that target the development of community organizations, the strengthening of key services such as schools and safety and the role of physical changes through excellent design in neighborhood improvement. Course pedagogy will emphasize intense interaction between students and between the students and instructor, using lectures, small group discussions and presentation of student projects. Class assignments will include two short analytical papers (3-5 pages) and a major analytical or urban design project. For MSW Program SED Concentration students, this course may be substituted for S60-5016 Community Development Practice: Basic Concepts and Methods, and counted as an SED concentration Practice Methods course. For Master of Architecture students, this course fulfills Urban Issues elective requirement. For Master of Urban Design students, this course fulfills MUD Track elective requirement. Same as home course S60 SWCD 5079. 3 units

SECT 01: Class dates: 1/19/12-5/3/12. No class 3/13/12. Registration Information: Enrollment in this course is limited to 14 Social Work students and 14 Architecture students. To ensure that balance, all students must initially join the waitlist to enroll in this course. Registrars will persistently check the waitlist and add the correct number of students from each School to the course roster, based on order of joining the waitlist.
01  Th 5:30p-7:40p   Webber
**ARCHITECTURAL DESIGN**
A46 511/512/611/612 ARCH
Prereq: Satisfactory completion of Arch 419 or equivalent. Twelve hours of studio work a week. 6 units
01 MWF 1:30p-5:30p
Booth
Cruse
Dykers
Hoeferlin
Jantzen
Koster
Lima
Marjanovic/Wooster
McCarter
Ruy
Stuart-Smith

**TOPICS IN ADVANCED ARCHITECTURAL COMPUTING: PERFORMATIVE SKINS**
A46 521H ARCH
Course participants will explore the materiality and environmental suitability of skins, and will be encouraged to find the answers to questions about their topological performance in the context of dynamic environments and in the reality of their anthropospheric state of existence. Building Performance Analysis will facilitate the morphing of architectural design through various phases of environmental simulations; Insolation, light, wind and acoustics, for the purpose of creating a digitally altered tectonics that is most suitable of in situ conditions. Prereqs for the class are an advanced knowledge of various digital modeling techniques and a basic understanding of sustainable design principles. An attempt will be made to establish a direct link between analytical results obtained with Ecotect and various applications supporting Smart Geometry, (Generative components). 3 units
01 W 6:00p-9:00p Zigo

**DYNAMIC ARCHITECTURAL VISUALIZATION**
A46 521K ARCH
Spatial animation for architecture urban design, landscape and interior design is being used as an everyday design process. This powerful dynamic media allows designers to fully understand and comprehend the totality of natural phenomena and spatial perception within the digital environment. This course explores the basic aspects of design and producing digital animations. Students develop storyboards in terms of clarity of storyline, time curves, motion paths, and advanced rendering techniques. Key frame and interpolation techniques are developed to aid the editing process. This course also covers video editing as a creative tool combining audio and visual manipulation. Each student will engage in dynamic perception through assemblage of time, space, and emotional aspects of cinemetic experience. 3 units
01 Tu 6:00p-9:00p Smith

**BUILDINGS & THEMES IN FINNISH ARCHITECTURE**
A46 523F ARCH
Fulfills History/Theory elective requirement.
SECT 01: Helsinki International Semester students only
01 TBA Jetsonen

3 units
New Disciplinary Dynamics: Blurs and Exchanges. Over the past decade, the various professions engaged in the construction of the built environment have been investigating (both in theory and practice) a specific and deliberate blurring, hybridization, and expansion of the traditional semantic and historical categories of landscape, architecture, and urbanism in an attempt to confront changing situations, environments, and cultures. Across geographical and cultural boundaries, the proliferation of projects (speculative and built) and essays appearing in recent years makes this phenomenon more than a passing trend or the product of individual reflection. Architecture, for example, as a conventional discipline with its own tasks, internal logic, and modus operandi has become so heterogeneous that it can no longer adequately authenticate its products from within the limits of its historical category. The same holds true of the allied fields of landscape and urbanism. Strict disciplinary boundaries are no longer capable of attending to the complexity of contemporary demands produced by mobility, density, de-urbanization, hybrid programs, changing uses, and ecological concerns. The contemporary world forcibly imposes the need for greater flexibility and indeterminacy and for new techniques of practice that are anticipatory, receptive to change, and capable of opening an aperture to the future. This course will explore these disciplinary slippages and hybrid contacts between until now distinct categories through essays and built or speculative works. Fulfills Urban Issues elective. Can count as a MUD Track elective. 3 units

01  Tu 1:00p-4:00p    Daskalakis

This seminar will address timely conceptual and practical issues about architecture by studying the design and theoretical works of Italian-born Brazilian architect, Lina Bo Bardi (1914-1992). As one of the very few prominent women architects in the twentieth-century, she articulated many important questions that remain open in contemporary architecture. Her work ranged from editorial to curatorial projects, from furniture to urban design, and from new buildings to restoration and adaptive reuse projects. The title of this course refers to a posthumous book she organized in the later years of her life, in which she addressed the dilemmas of designing in a world in which basic human needs and shared social values are often at odds with the pervasiveness of individualism, images and commodities in a globalized Western culture. The seminar will be divided in three modes: lectures, individual research, and an exhibition project. Lectures will focus on a comprehensive approach to her life, work, and ideas. Individual research will focus on analyzing specific works organized by categories with access to both secondary and primary sources. The results of the research will be incorporated into a curatorial project for a pilot exhibition investigating the significance of her legacy to contemporary architects and designers. Fulfills History/Theory elective requirement. 3 units

01  Tu 6:30p-9:30p  Lima
THE CRITICAL EVOLUTION OF MODERN ARCHITECTURE: CIAM, TEAM 10, AND THE OTHER TRADITION TODAY

A46 528R ARCH

A graduate seminar exploring the critical evolution of the modern movement in architecture, from the founding of the CIAM (International Congresses of Modern Architecture) in 1928; tracing the emergence, in parallel to CIAM, of what has sometimes been called the "Other Tradition" of modern architecture, which involved both the work of pivotal individual practitioners, as well as the emergence of collective movements, most particularly Team 10, from 1953-82; a series of regional "schools" of architecture, from 1945-65; and the Neo-Rationalist movement, from 1966-90. The seminar will also explore the work of selected contemporary practitioners that exemplify the critical evolution of modern architecture. The first part of the course will consist of a series of lectures and discussions about the critical evolution of modern architecture. Following the introductory lectures, each class will consist of student presentations on specific post WWII projects, forming the basis of discussions of the architectural and urbanistic ideas of Le Corbusier, Josep Lluis Sert, Alvar Aalto, Ernesto Rogers, Aldo van Eyck, Jacob Bakema, Alison and Peter Smithson, Candidias-Jost-Woods, Paul Rudolph, William Wurster, Craig Ellwood, Giancarlo de Carlo, Louis Kahn, Colin St. John Wilson, Aldo Rossi, as well as contemporary practitioners such as Fumihiko Maki, Charles Correa, Herman Hertzberger, Rafael Moneo, and others. Analytical methods employed in the student presentations will address contextual, cultural, material, constructive, and experiential attributes of buildings. Students will have the option to work individually or in teams of two, and will be expected to research and prepare two in-class presentations; providing summary documentation in the form of a research paper and CD of the graphic presentation. Open to graduate students in architecture, art, and art history. Prereq: A46 4284 Architectural History II, or equivalent course taken elsewhere. Fulfills History/Theory elective requirement. 3 units

01 M 9:00a-12:00p McCarter

FROM THE INSIDE OUT: PUBLIC HEALTH & THE BUILT ENVIRONMENT

A46 5335 ARCH

The built environment has contributed to and advanced public health and safety since the era of 3200 BCE when Hammurabi, the founder of the Babylonian Empire, proclaimed the 'Code of Hammurabi.' This code called for construction of 'firm houses' that would not collapse on their owners and for the imposition of severe penalties on constructors whose buildings collapsed. The same basis of care and prudent practice is in force today in building design, construction, environmental engineering, and community and urban design in order to protect public health and safety and the natural environment. This Transdisciplinary Problem Solving course will discuss issues in the US and within a global context of housing, healthy communities, sustainable design, environmental quality, and occupational health and safety. Students will prepare a health impact assessment (HIA) for a selected building or community development site. Pre-requisite or co-requisite for MPH Program Students: S55-5005 Research Methods or permission of instructor. Same as home course S55 MPH 5335. 3 units

SECT 01: Class dates: 1/18/12-5/2/12. No class 3/14/12. 01 W 9:00a-12:00p Baum Hipp

SITE PLANNING

A46 552B ARCH

This course introduces the fundamental concepts and principles of physical planning and design at the scale of the site. Through lectures and discussions, preparation of drawings, and field trips, students will engage the various stages of site selection, programming, site analysis, conceptual design, and site design. Projects will articulate the relation of buildings to major site features, circulation and parking systems, and outdoor spaces. The course also covers the site plan review process in which proposed projects are evaluated for their compliance with plans and regulations and aims at preparing students for the ARE (Architecture Registration Exam). 3 units

01 TuTh 10:30a-12:00p Fetterman
THE ARCHITECTURE OF MEDICINE  A46 568B ARCH

This seminar will offer students in architecture and engineering an overview of issues involved in the planning and design of facilities for medicine and the problem-solving design process required in projects of this type. Medical-based building uses include: Laboratories (biomedical sciences, instrumentation, clinical, etc.); In-patient facilities (hospitals, rehabilitation centers, in-patient surgery, blood bank, pathology, etc.); and Medical facilities (out-patient surgery and procedure, radiology, etc.). The course will examine the problem-solving process and specific design issues of buildings designed for medical science and treatment. It will show the opportunities for integrating sustainable principles in the design. The problem-solving process will start with programming, follow with planning exercises, and focus on engineering issues for the design process. Students will go on 5 tours to see interesting local facilities that provide good examples of functional design for medical uses listed above. Examples of potential local tours include: WUSM's Mallinckrodt Institute of Radiology, BJC Hospital facilities, and SLU-SOM's new clinical research laboratory (J. Baum designed). The course will review examples of buildings for medicine by notable national and international architects, as well as interesting well-executed buildings of note and where sustainable design has been incorporated into the design. The objective of reviewing existing buildings will be to investigate the technical challenges posed by the function and use of the building. Because we will generally not be able to find much on the problem-solving process and specific design issues of these buildings, the students' investigations will be limited to what is published. 3 units

01 TuTh 10:00a-11:30a    Baum

ECOLOGICAL ECONOMICS  A46 579 ARCH

This course is designed to give students an appropriate graduate-level understanding of the fundamental assumptions, the conceptual novelties, and the distinctive tools of analysis that comprise the emerging discipline of ecological economics, and to explore the role this new paradigm is playing in the movement toward a sustainable society. Standard economics—the neoclassical model—sees the economy as the whole that contains all other values; nature has value because some people will pay to experience it or to enjoy its services. Ecological Economics reverses that relationship by acknowledging the environment, not the economy, as the containing whole. This it does through its grounding in the laws of energy—the laws that model the behavior of both natural and built systems. (While matter can be recycled, energy can't. No machine can take its own exhaust outputs as fresh inputs; no animal can survive by eating its own excrement.) Fulfills Urban Issues elective requirement. Fulfills MUD Track elective requirement. 3 units

01 Th 1:00p-4:00p  Zencey

DESIGN THINKING: RESEARCH AND DESIGN METHODS  A46 580 ARCH

Covers the fundamentals of project planning, proposal writing and alternative research and design methods. This course is a prerequisite for Arch 616 Design Project. Grade of “B” or better required in preceding two studios. 3 units

01 Tu 2:30p-5:30p    Daskalakis
                      Fehrmann
                      Hoeferlin
                      Kim
                      Luchini
                      Moyano

INDEPENDENT STUDY  A46 582 ARCH

Prereq: Sponsorship by an instructor and permission of the Dean of the School of Architecture. Each independent study must be approved by the end of the first week of classes. Credit variable, max 9 units*

** See start of this departmental entry or contact department directly for details on faculty/sections and enrollment.
DEGREE PROJECT
Independently initiated design and research projects based on Design Thinking (Arch 580) proposal to fulfill final requirements for professional degree award. Prereq: Design Thinking (Arch 580). PERSONAL COMPUTER REQUIRED IN STUDIO. Twelve hours of studio work a week. 6 units
01 MW 1:00p-7:00p  Dean
Fehrmann
Hoffman
Holden
Kim
Luchini

PROFESSIONAL PRACTICE I
Develops awareness and understanding of architectural practice including the relation of the profession to society as well as the organization, management and documentation of the process of providing professional services. Covers the areas of 1) project process & economics, 2) business practice & management, and 3) laws and regulations. Prereq: 500 level studio placement or above. 3 units
01 TuTh 10:30a-12:00p  Johannes
Scott
02 TuTh 9:00a-10:30a  Johannes
Scott

ADVANCED PROFESSIONAL PRACTICE:
ADVANCED FIRM & PROJECT MANAGEMENT
Advanced study of professional practice topics focusing particularly on firm management and project management. Firm-related topics will include starting a practice, financial management, marketing, staffing and risk management. Project-related topics will include fee negotiation, project structures and participants, scheduling, use of AIA contracts and management documents, and construction document systems. 3 units
01 TuTh 4:00p-5:30p  Johannes

METROPOLITAN DEVELOPMENT: WHAT'S IN A PLAN?
This course explores pluralist, pragmatic and progressive planning strategies for American urbanism. It will provide students with an introduction to the design and planning of American cities in the context of this country’s democratic tradition, its multi-cultural society, and the particular morphology of its urban areas. Contemporary American cities have urbanized in unprecedented and distinctive ways that suggest the creation of a unique urban culture, despite the seeming globalization of urban trends, or the apparent universalization of urban forms. Identifying the role design can play in this culture requires a lucid appraisal of the context in which metropolitan development takes place. Four study modules will introduce basic issues in planning law, real estate finance, urban economics and environmental planning through lectures and research projects, as well the presentation of Metropolitan St. Louis development case studies by professional and political leaders. 3 units
01 F 8:00a-12:00p  Heyda
## CONTEMPORARY PRACTICES OF SUSTAINABLE URBANISM

This seminar will investigate those contemporary practices of Sustainable Urbanism that exemplify a concern for locality, place, culture, community and authenticity. Sustainable urbanism is understood not as a pre-defined goal or form, but as a contested territory involving socially constructed processes, conflicting values and competing interests that dictate urban change and the consumption of urban space all mediated through the practice of urban design. To this end, different methodological approaches to urban sustainability will be investigated, including LEED ND, ZED Cities, Regenerative Urbanism, The Natural Step, Eco-Urbanity, Resilient and Smart Cities. The research project of the seminar will focus on the Delmar Loop/ Parkview Gardens neighborhood, which was recently awarded a HUD/DOT Sustainable Communities Grant with the intent that the students develop a Sustainable Urban Design Plan and Code for the area. This course will be augmented with presentations by local practitioners of sustainability plans and include an optional site visit to Portland, OR and/or Vancouver, Canada to fully investigate and understand the respective city’s implementation of sustainable urbanism. This course fulfills the Urban Issues elective requirement for the M.Arch degree. Undergraduate enrollment is allowed by arrangement with the instructor. Can count as a MUD Track elective. 3 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Instructor</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A46 657 ARCH</td>
<td>CONTEMPORARY PRACTICES OF SUSTAINABLE URBANISM</td>
<td>Hoal</td>
<td>3</td>
</tr>
</tbody>
</table>

## HISTORIC PRESERVATION/URBAN DESIGN

This course will explore the history and current practice of historic preservation in the United States and will relate it to broader principles of contextual architectural design and urban design. Emphasis will be placed on practical knowledge needed to participate professionally in historic preservation, including how to evaluate the associative and architectural significance of a property or district, how to provide legal protection for historic resources, how to appropriately restore, rehabilitate, and add to historic buildings, and how to incorporate historic preservation into the broader framework of urban planning and design. The course will focus on readings and student discussions but will draw extensively on real preservation situations in the region. A field trip will be organized if possible. Fulfills History/Theory elective requirement. Fulfills Urban Issues elective requirement. Can count as a MUD Track elective. 3 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Instructor</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A46 664 ARCH</td>
<td>HISTORIC PRESERVATION/URBAN DESIGN</td>
<td>Hamilton, Toft</td>
<td>3</td>
</tr>
</tbody>
</table>

## INDEPENDENT STUDY

Prereq: Sponsorship by an instructor and permission of the Dean of the School of Architecture. Each independent study must be approved by the end of the first week of classes. Credit variable, max 9 units ** See start of this departmental entry or contact department directly for details on faculty/sections and enrollment.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Instructor</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A46 682 ARCH</td>
<td>INDEPENDENT STUDY</td>
<td>Hoal</td>
<td>Variable</td>
</tr>
</tbody>
</table>

## M.U.D. STATUS

All students who are in the Master of Urban Design program should register for this course as an audit. This will allow the school to keep track of students in this program. 0 units

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Instructor</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A46 710 ARCH</td>
<td>M.U.D. STATUS</td>
<td>Hoal</td>
<td>0</td>
</tr>
</tbody>
</table>

## METROPOLITAN DESIGN ELEMENTS

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Instructor</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>A46 713 ARCH</td>
<td>METROPOLITAN DESIGN ELEMENTS</td>
<td>Hoal, Schulze</td>
<td>6</td>
</tr>
</tbody>
</table>
**GIS**

This course module will introduce GIS mapping software and its application to methods used in site planning and design. The focus of this half-semester course is to understand the potential of GIS to analyze, visualize, and utilize complex data. Students will learn techniques and tools in ArcGIS software, and explore how these can be applied to projects specific to individual sites. This course will introduce new skills and analytical complexity while building upon previously learned representation techniques. 1.5 units

**SECT 01:** This module will meet beginning on January 17, 2011 and conclude on March 1, 2011.  
01 Th 1:00p-4:00p  
Scherma  
Yates

---

**LANDSCAPE ON STRUCTURE**

This course will examine materials and technologies for landscapes on Structure—green roofs and vertical gardens, among others. Through a series of case studies, students will gain an understanding of the relationships between structure (architecture and infrastructure) and substrate, soil, water, and plants. Topics covered include innovative planting and urban streetscape systems, and infrastructural adaptation and re-use. Exercises will range from analytical diagrams of construction methods to design concepts for living systems adapted to a variety of structural and environmental conditions. Open to students in architecture, landscape architecture, and urban design. 3 units

**SECT 01:** Tu 9:00a-12:00p  
Cowles

---

**PLANTING DESIGN I**

The Planting Design module builds upon the Plants and Environment class, applying and expanding the vocabulary of plant material to understand the definition and construction of landscapes. Students will gain an awareness of planting typologies and strategies through function (micro-climate control, water consumption, hardiness) and perception (shade, color, density, texture). A series of design exercises will inform strategic plant specification in order to suit, define, or reinvent landscape typologies—from parks and gardens to green roofs and restorative landscapes. Conceptual thinking and an understanding of management and sustainability are emphasized. 1.5 units

**SECT 01:** This module will meet beginning on Tuesday, March 6  
01 Th 1:00p-4:00p  
Kacenski

---

**MAPPING THE METROPOLITAN MISSISSIPPI**

This seminar explores the relationship of city to river through reading, recording, and mapping. Students will document their research, create proposals, and develop simulations and/or prototypes for a site on the St. Louis riverfront. Methods of inquiry will combine hand-recording, photography, GIS techniques and DIY devices. The course will alternate discussion sessions, field research, and lab. Open to all graduate students; undergraduates require the instructor’s approval. Same as A46 ARCH 480B. 3 units

**SECT 01:**  
01 Th 9:00a-12:00p  
Yates

---

**LANDSCAPE ARCHITECTURE DESIGN STUDIO II: PLANNING & PRESERVATION**

The final studio in the core sequence operates within an expanded spatial and conceptual framework. Students will engage the complexities of the large-scale site to explore, critique, and re-engineer ecological, architectural, socio-economic, and ideological systems. A studio site characterized by environmentally sensitive conditions, culturally significant features, and encroaching urbanization will lead to choices between the management of existing resources and development. To achieve this, students will progress from the analysis and mapping of the site to the generation of innovative program strategies. Finally they will develop those strategies into schematic design proposals. Throughout, landscape is treated as figure instead of ground, serving as an agent to structure and mediate between natural and human communities. 6 units

**SECT 01:** MWF 1:30p-5:30p  
Cowles
**PRINCIPLES OF ECOLOGY**  
A48 581 LAND  
The course serves as an introduction to the principles and methods of ecology, particularly as applied to the character, form, and function of landscapes. Studying the theory and findings of landscape ecology will allow students to gain familiarity with ecological research and begin to integrate that knowledge into design practice. Topics include the interaction of natural and built systems (forest, wetland, fields, roads, corridors, patches), the morphology of habitats, the movement of organisms and nutrients across ecosystems at different scales, and the dynamism of landscapes in time. The class incorporates lectures, extensive readings, field trips, and guest presentations by specialists, along with assignments combining research work and first-hand field studies. Can count as a MUD Track elective. 
3 units
01  F 9:00a-12:00p    Scherma

**INTRO TO ARBORICULTURE**  
A48 560 LAND  
Trees play a significant role in the overall ecosystem of our planet. They function both globally as well as microscopically. By better understanding the anatomy, physiology, growth habits and needs of trees, we can make more informed decisions as designers. There are finite, quantifiable aspects to how a tree develops, yet there are also environmental and human factors that can disturb or interrupt normal functions and patterns. It is the charge of the designer to delve into the science of trees in order to better inform our design solutions and make appropriate sustainable choices. Fulfills Natural Systems elective requirement.  
3 units
01  F 9:00a-12:00p  Gaidis

**LANDSCAPE ARCHITECTURE: HISTORY & THEORY I**  
A48 570 LAND  
This course presents the history of landscape architecture from 1850 to the present day with a particular emphasis on the Western world. By studying the projects and writings that defined the modern landscape architecture discipline and by exploring connections to urbanism and architecture, students will be able to situate their own design investigations in a historical context. A series of lectures and discussions will highlight themes that are of continued relevance, including professional identity, regionalism and nationalism, gender and design, and social and ecological responsibility. Projects will range from the garden to the city and from garden city to highway. The scope of investigations will integrate lesser-known or marginalized figures of landscape architecture to critically assess the role and image of the profession. Students are expected to actively participate in class, respond to readings in writing, and establish parallels between historical and contemporary examples.  
3 units
01  TuTh 9:00a-10:30p  Imbert

**TERRITORIAL CONTEXTS**  
A48 573 LAND  
The scope of planning operations has steadily widened over the course of the twentieth century, from metropolitan areas to expansive natural and cultural regions. At the same time, designers have increasingly aimed to synthesize vastly complex data in order to analyze project sites and their wider contexts. This course examines the ongoing intersection of geography and design, through analytical methods combining spatial measure with demographic, environmental, and economic data. Students will build on the lineage of geographical inquiry in planning, from Cerda and Haussmann to the theories of Patrick Geddes; from Lewis Mumford, Benton MacKaye, and Clarence Steins’ Regional Planning Association of American to CIAM; and from the experiments of Buckminster Fuller to the ecological determinism of Ian McHarg. In addition to responding to weekly readings, students will revisit large-scale analytical works through new methods of mapping and modelling. Fulfills Urban Issues elective requirement. Can count as a MUD Track elective.  
3 units
01  Tu 1:00p-4:00p  Scherma

**LANDSCAPE ARCHITECTURE DESIGN STUDIO VI**  
A48 602 LAND  
6 units
01  MWF 1:30p-5:30p  Dykema
PROFESSIONAL PRACTICE FOR LANDSCAPE ARCHITECTURE: BUSINESS, PRACTICE & MANAGEMENT

Advanced study of professional practice topics focusing on firm management and project management for landscape architecture projects. Firm-related topics will include starting a practice, financial management, legal structures, marketing, staffing, professional ethics and risk management. Project-related topics will include fee negotiation, project structures and participants, scheduling, use of contracts and management documents, and construction document systems. Course activities will include project site visits and visits to local firms with landscape architecture design services. 3 units

01 Th 1:00p-4:00p Johannes Beckham

DRAWING I

X10 101 XCORE

An introductory course which teaches the student to recognize and manipulate fundamental elements of composition, line, form, space, modeling, and color. Emphasis is placed on working accurately from observation, with an introduction to other methodologies. Students work in a variety of media. Demonstrations and illustrated lectures supplement studio sessions and outside projects. Lab, materials fee: $10.00. 3 units

01 MW 1:00p-4:00p Lamboley

DRAWING II

X10 108 XCORE

Continuing as an introductory course which teaches the student to recognize and manipulate fundamental elements of composition, line, form, space, modeling and color. This course is an intensive studio course which builds on the perceptual and conceptual skills and experiences developed in Drawing I. A main objective will be to develop a higher level of critical and studio practice. Prereq: X10 101. Lab, materials fee: $10.00. 3 units

02 MW 1:00p-4:00p Adams, J.
03 MW 4:30p-7:30p Lane
04 TuTh 8:00a-11:00a Borgman
05 TuTh 8:00a-11:00a Thomas
06 TuTh 1:00p-4:00p Borgman
07 TuTh 1:00p-4:00p Judge
08 TuTh 4:30p-7:30p Hyland
09 TuTh 4:30p-7:30p Koster

PRACTICES IN ARCHITECTURE + ART + DESIGN

X10 182 XCORE

This course offers first-year students in architecture and art an introduction to the subjects, theories, and methodologies of the disciplines of art, design, architecture, landscape architecture, and urban studies. Examples drawn from a range of historical periods as well as contemporary practice highlight distinct processes of thinking and working in each discipline, as well as areas of intersection and overlap supplemented by a series of presentations by faculty. Part 2 of 2. 1 unit

01 F 11:00a-12:00p Colangelo Lindsey Spector
This course examines art, architecture, and urbanism from the perspective of their global production, dissemination and reception. It focuses on the global exchange of people and ideas as one of the main vehicles of visual culture, both historical and contemporary. Through a series of focused case studies, the course will probe inherent dichotomies within art and architecture driven by their site-specificity, yet also by their constant global displacement across various disciplinary, cultural, and geographical boundaries. The course content includes lectures, discussion sessions, readings, and textual and visual projects that examine cross-cultural aspects of art and architecture. The course is offered as part of the Sam Fox Commons and the University-wide Global Certificate and is open to all students at Washington University regardless of their major field of study. Fulfills Sam Fox Commons Course requirement. Same as I 51 Global 301.

01  MW 10:30a-12:00p  Marjanovic
Undergraduate Studio Assignments and Selection

All 411 and 312/412 (upon approval) undergraduate level students are required to attend a meeting on Wednesday, January 18th at 2:00pm in Kemp Auditorium. Studio professors will present their programs for Spring 2012 at this time and be available for questions concerning their studios.

ALL 411 and 312/412 undergraduate students ARE REQUIRED TO ATTEND THIS MEETING. Studio Preference Sheets will be provided at the meeting and students must rank and submit their choice of studios following the presentations by 4:30 p.m. on Wednesday, January 18th, 2012.

No preference sheets will be considered before this meeting.

Graduate Studio Assignments and Selection

All 500/600/MUD graduate level students are required to attend a meeting on Wednesday, January 18th at 2:00pm in Steinberg Auditorium. All 500/600/MUD studio professors will present their programs at this time and be available for questions concerning their studios.

ALL 500/600/MUD graduate students ARE REQUIRED TO ATTEND THIS MEETING. Studio Preference Sheets will be provided at the meeting and students must rank and submit their choice of studios following the presentations by 4:30 p.m. on Wednesday, January 18th, 2012 to Givens 105.

No preference sheets will be considered before this meeting.

Studio assignments and locations for students at the 318, please watch your email for more information.

Degree Project desk selection will take place on Tuesday, January 17th at 8pm.

Desk selections for vertical studios will take place Thursday, January 19th at 9:30pm. Individuals will select their desk based on an order determined via random lottery proctored by a GAC representative.
MESSAGE FROM THE GAC

A Greeting from the GAC,

Welcome all to the Spring 2012 semester. This is an important semester for the school; as you well know accreditation will be taking place. This is of great importance to the school and the GAC will be organizing a Q & A early in the semester with Dean Lindsey. This is an opportunity to bring forth any questions about the accreditation process and what it means to us and for the university.

The Year End Show, showcasing and celebrating the accomplishments of Degree Project students from the Fall and upcoming Spring semester, is happening in May. I encourage everyone interested in helping out to let us know as soon as possible in person or via email (gac@samfox.wustl.edu). Last Spring’s exhibition was a great success and we hope to build on that for this year.

The GAC will reprise its role in proctoring the allotment of studio spaces via lottery, so please be aware of the time and attend the drawing. Students not present will be at the whim of his or her studio mates. Once again, the time for the lotteries is later so that students with classes finishing at 9pm will be able to attend.

Those interested in a more direct role in student life at Givens should consider running for next year’s GAC council. Elections will be held in mid-March and an email will be sent out prior looking for nominations.

Finally, GAC meetings are held every other Wednesday at noon, starting the 25th of January in the lounge and all students are invited to attend.

Your GAC President,

Daniel Bollard
MESSAGE FROM THE ASC

Architecture friends,

It is with great pleasure that I welcome you all for our spring semester. The Architecture School Council has been hard at work to prepare for this semester. We have many exciting items planned, here are just a few:

- Publish the Architecture Student Portal—an internal website for students where all digital resources for the school are found (laser cut schedule, wood shop hours, etc.)
- Adjust the newly initiated Bauhaus donations system to better support the Alberti Program
- Resolve IT issues in Whitaker and the FabLab
- Represent architecture students as the administration works out the Study Abroad program
- Continue to bring you important news in our monthly newsletters
- Evaluate the interest for an active AIAS chapter at our school
- Offer regular sessions of yoga instruction for students to increase healthy activities!

With the implementation of the new curriculum for undergraduate students, ASC NEEDS YOU TO BE MORE VOCAL ABOUT YOUR EXPERIENCE! Its up to you to make the school as good as it can be. Do not hesitate to drop us an email at asc@samfox.wustl.edu or to come by our meetings this semester. We are here to represent YOU!

Have a great semester,

Architecture School Council

Sean Michael Dula, President
Eli Sokol, Vice President for Academic
Grant McCracken, Vice President for Social
Kevin Hall, Treasurer
Michael Offerman, Secretary
Digital Fabrication Lab (FabLab)

LaserCutters
The School has three Laser cutter Machines, two of which are posted on the Schedule and available for sign-up. To sign-up:

- go to http://officenet.samfox.wustl.edu/sites/digfab/SitePages/Home.aspx
- sign-in using your SamFox email username and password
- fall 2011 entering students, sign-in with your WUSTL Key
- sign-up with your full name and cell phone number
- sign-up is limited to 1 hour per student per day max.

The third Laser cutter remains off the schedule and is used as a fail-back incase any of the machines experience problems or if the schedule gets backed-up.

All students within the SamFox community are eligible to use these machines. Students will be charged $2.50 for every 15 minutes of laser cut time.

If a student fails to show up for three scheduled appointments, he/she will not be allowed to laser cut until a $15 penalty is paid via Papercut.

A walkthrough of how to set up your Laser cut files properly and basic information can be found in the Courses > FabLab Drop > Guides > Lasercutting101.

3D Printers and CNC Mill
The School has two 3D Printers, one with a water-soluble support material and the other with a break-away support material. It also has a CNC Mill for model-making. A walkthrough of how to set up your 3D Print / Mill files properly and basic information can be found in the Courses > FabLab Drop > Guides > 3DPrint101 and CNCMill101.

To sign up for 3D Printing and CNC Milling, or to run a test on your model, please contact Christian at christianC@samfox.wustl.edu.

Priority for the 3D Printer and CNC Mill is given to students in the Digital Fabrication Studios.

Digital Initiative Lab (DIL)
The School has a 5'x8' CNC Router, 1sq m. Thermaforming Oven, and a 4'x8' Frame Press. These machines are to be used by students in digital fabrication studios and courses. Permission for individual student use may be granted by contacting Ken Tracy, kentracy@samfox.wustl.edu.
CONTACTS: FACULTY

Andrew Cruse
Visiting Assistant Professor
Office: Givens 212
Email: cruse@samfox.wustl.edu
Voice: +1 314.935.6200

Gia Daskalakis
Associate Professor
Office: Givens Hall 209
Email: giad@samfox.wustl.edu
Voice: +1 314.935.6282

Kathryn Dean
Director, Graduate School
Office: Givens Hall 107
Email: kathryn@dean-wolf.com
Voice: +1 314.935.6210

Paul J. Donnelly
Rebecca & John Voyles Professor
Office: Givens Hall 111
Email: donnelly@samfox.wustl.edu
Voice: +1 314.935.6282

Iain Fraser
Professor
Office: Givens Hall 107
Email: fraser@samfox.wustl.edu
Voice: +1 314.935.6210

Catalina Freixas
Senior Lecturer
Office: Givens Hall 209
Email: freixas@samfox.wustl.edu
Voice: +1 314.935.6282

Bob Hansman
Associate Professor
Office: Bixby Hall 116
Email: hansman@samfox.wustl.edu
Voice: +1 314.935.7221

Derek Hoeferlin
Assistant Professor
Office: Givens Hall 212
Email: hoeferlin@samfox.wustl.edu
Voice: +1 314.935.4202
CONTACTS: FACULTY

Patty Heyda
Urban Design Assistant Professor
Office: Givens Hall 210
Email: heyda@samfox.wustl.edu
Voice: +1 314.935.6299

Sung Ho Kim
Associate Professor
Office: Steinberg Hall 206
Email: sunghkim@samfox.wustl.edu
Voice: +1 314.935.6292

John Hoal
Associate Professor
Office: Givens Hall 109
Email: hoal@samfox.wustl.edu
Voice: +1 314.935.6281

Phil Holden
Senior Lecturer
Email: holden@printmail.com

Dorotheé Imbert
Chair, Master of Landscape Architecture Program
Office: Givens 112
Email: imbert@samfox.wustl.edu
Voice: +1 314.935.6200

Christof Jantzen
I-CARES Professor
Office: Givens Hall 111
Voice: +1 314.935.6200

George Johannes
Senior Lecturer
Email: gjohannes@wustl.edu

Donald Koster
Senior Lecturer
Office: Bixby Hall 118
Email: koster@samfox.wustl.edu
Voice: +1 314.935.9297

Stephen Leet
Professor
Office: Givens Hall 211
Email: leet@samfox.wustl.edu
Voice: +1 314.935.6281
Contacts: Faculty

Zueler Lima
Associate Professor
Office: Givens Hall 210
Email: zlima@samfox.wustl.edu
Voice: +1 314.935.6200

Bruce Lindsey
Dean/ E. Desmond Lee Professor
Office: Givens Hall 108
Email: blindsey@wustl.edu
Voice: +1 314.935.4636

Gay Lorberbaum
Senior Lecturer
Office: Bixby Hall 122
Email: lorberbaum@samfox.wustl.edu
Voice: +1 314.935.9299

Adrian Luchini
Raymond E. Maritz Professor
Office: Givens Hall 211
Email: luchini@samfox.wustl.edu
Voice: +1 314.935.6681

Seng Kuan
Assistant Professor
Office: Givens Hall 112
Email: skuanatsamfox@gmail.com
Voice: +1 314.935.6213

Peter MacKeith
Associate Professor, Associate Dean
Sam Fox School of Design and Visual Arts
Office: Givens Hall 105-B
Email: mackeith@samfox.wustl.edu
Voice: +1 314.935.6626

Igor Marjanovic
Associate Professor, Undergraduate Programs Director
Office: Givens Hall 111
Email: marjanovic@samfox.wustl.edu
Voice: +1 314.935.6626

Robert McCarter
Ruth & Norman Moore Professor
Office: Givens Hall 109
Email: mccarter@samfox.wustl.edu
Voice: +1 314.935.6626
CONTACTS: FACULTY

**Pablo Moyano**  
Senior Lecturer  
Office: Givens Hall 111  
Email: @samfox.wustl.edu  
Voice: +1 314.935.6200

**Eric Mumford**  
Professor  
Office: Forsyth House  
Email: mumford@samfox.wustl.edu

**Phillip Shinn**  
Senior Lecturer  
Office: Givens Hall 110  
Email: phillip.shinn@jacobs.com  
Voice: +1 314.935.6275

**Lindsay Stouffer**  
Senior Lecturer  
Email: stouffer@samfox.wustl.edu  
Voice: +1 314.935.6200

**Kenneth Tracy**  
Visiting Assistant Professor  
Office: Bixby 116  
Email: kentracy@samfox.wustl.edu  
Voice: +1 314.935.6200

**Bill Wischmeyer**  
Senior Lecturer/Director, Architectural Technology Program  
Office: Givens Hall 110  
Email: wishmeyer@samfox.wustl.edu  
Voice: +1 314.935.6275

**Heather Woofter**  
Assistant Professor / Graduate Chair  
Office: Forsyth House  
Email: woofter@wustl.edu

**Christine Yogiaman**  
Digital Assistant Professor  
Office: Given 209  
Email: yogiaman@samfox.wustl.edu  
Voice: +1 314.935.6200
Heather C. Atkinson
Administrative Assistant
Office: Givens Hall 105
Email: atkinson@samfox.wustl.edu
Voice: +1 314.935.7215

Ellen Bailey
Administrative Assistant
Office: Givens Hall 105
Email: ebailey@samfox.wustl.edu
Voice: +1 314.935.6200

Bruce Carvell
Registrar
Office: Bixby Hall 1
Email: carvell@samfox.wustl.edu
Voice: +1 314.935.6205

Daphne Ellis
Assistant to the Dean
Office: Givens Hall 108
Email: ellis@samfox.wustl.edu
Voice: +1 314.935.4636

Erika Fitzgibbon
Career Development Director
Office: Givens Hall 120
Email: efitzgibbon@samfox.wustl.edu
Voice: +1 314.935.4187

Brian Higginbotham
Financial Aid Awards Associate
Office: Bixby Hall 1
Email: higginbotham@samfox.wustl.edu
Voice: +1 314.935.3642

Kathleen O’Donnell
Administrative Coordinator
Office: Givens Hall 105
Email: oconnell@samfox.wustl.edu
Voice: +1 314.935.6227

Leland Orvis
Facilities Director
Office: Givens Hall 3
Email: orvis@samfox.wustl.edu
Voice: +1 314.935.6330
<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>20 Friday</td>
<td>SFS Lecture: Kyna Leski Lecture, arch</td>
</tr>
<tr>
<td></td>
<td>30 Monday</td>
<td>SFS Lecture: Balazs Kicsiny, art</td>
</tr>
<tr>
<td>February</td>
<td>01 Wednesday</td>
<td>SFS Lecture: Craig Dykers, arch</td>
</tr>
<tr>
<td></td>
<td>06 Monday</td>
<td>SFS Lecture: Michael van Valkenburg, arch</td>
</tr>
<tr>
<td></td>
<td>13 Monday</td>
<td>SFS Lecture: Monica Ponce de Leon, arch</td>
</tr>
<tr>
<td></td>
<td>15 Wednesday</td>
<td>SFS Lecture: Diane Victor, art</td>
</tr>
<tr>
<td></td>
<td>18 Wednesday</td>
<td>SFS Lecture: Brigitte Shim, arch</td>
</tr>
<tr>
<td></td>
<td>20 Monday</td>
<td>SFS Lecture: Jessica Hische, art</td>
</tr>
<tr>
<td></td>
<td>27 Monday</td>
<td>SFS Lecture: Mabel Wilson, arch</td>
</tr>
<tr>
<td></td>
<td>29 Wednesday</td>
<td>SFS Lecture: Wang Shu, arch</td>
</tr>
<tr>
<td>March</td>
<td>05 Monday</td>
<td>SFS Lecture: Susan Laxton, art (KAM)</td>
</tr>
<tr>
<td></td>
<td>07 Wednesday</td>
<td>SFS Lecture: Robert Bruegmann, arch</td>
</tr>
<tr>
<td></td>
<td>21 Wednesday</td>
<td>SFS Lecture: Claudia Bernardi, art</td>
</tr>
<tr>
<td></td>
<td>26 Monday</td>
<td>SFS Lecture: Adam Budak, art</td>
</tr>
<tr>
<td></td>
<td>30 Friday</td>
<td>SFS Lecture: Grad Open House Lecture, arch</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Greg Pasquarelli, SHoP architects</td>
</tr>
<tr>
<td>April</td>
<td>04 Wednesday</td>
<td>SFS Lecture: Chelsea Knight, art (KAM)</td>
</tr>
<tr>
<td></td>
<td>11 Wednesday</td>
<td>SFS Lecture: Barbara Kasten, art</td>
</tr>
<tr>
<td></td>
<td>16 Monday</td>
<td>SFS Lecture: Trenton Doyle Hancock, art</td>
</tr>
<tr>
<td></td>
<td>18 Wednesday</td>
<td>SFS Lecture: Richard Sennett, arch</td>
</tr>
<tr>
<td></td>
<td>23 Monday</td>
<td>SFS Lecture: Julia Bryan Wilson, art</td>
</tr>
</tbody>
</table>

**All lectures are held in Steinberg Auditorium and are preceded by a reception in the Steinberg Lobby at 6:00 PM, unless otherwise noted.**
# ACADEMIC CALENDAR—SPRING 2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>January</strong></td>
<td></td>
</tr>
<tr>
<td>17 Tuesday</td>
<td>First day of class</td>
</tr>
<tr>
<td>18 Wednesday</td>
<td>SFS Faculty meeting, 12:00</td>
</tr>
<tr>
<td>18 Wednesday</td>
<td>Studio presentations, 2:00, Steinberg Auditorium</td>
</tr>
<tr>
<td>20 Friday</td>
<td>All School meeting, 4:00 Steinberg, happy hour</td>
</tr>
<tr>
<td>20-22 Friday</td>
<td>Laskey Sophomore Design Challenge, 4:30</td>
</tr>
<tr>
<td>21 Saturday</td>
<td>Strategic Planning retreat, 9:00-2:00</td>
</tr>
<tr>
<td>24 Tuesday</td>
<td>Architecture Faculty Meeting</td>
</tr>
<tr>
<td>25 Wednesday</td>
<td>Architecture Cabinet Meeting, 12:00 – 1:00</td>
</tr>
<tr>
<td>31 Tuesday</td>
<td>Curriculum Cmt. 12:00 -1:00</td>
</tr>
<tr>
<td>31 Tuesday</td>
<td>Course descriptions for summer and fall due</td>
</tr>
<tr>
<td><strong>February</strong></td>
<td></td>
</tr>
<tr>
<td>07 Tuesday</td>
<td>Architecture Faculty Meeting, 11:30</td>
</tr>
<tr>
<td>06 Wednesday</td>
<td>Architecture Cabinet Meeting, 12:00 – 1:00</td>
</tr>
<tr>
<td>10 Friday</td>
<td>Graduate Admissions Meeting, 9:00</td>
</tr>
<tr>
<td>14 Tuesday</td>
<td>Curriculum Cmt. 12:00 -1:00</td>
</tr>
<tr>
<td>21 Tuesday</td>
<td>Tenured and Tenure Track Faculty meeting</td>
</tr>
<tr>
<td>22 Wednesday</td>
<td>Architecture Cabinet Meeting, 12:00 – 1:00</td>
</tr>
<tr>
<td>25-29</td>
<td>NAAB Team Visit</td>
</tr>
<tr>
<td>28 Tuesday</td>
<td>Curriculum Cmt. 12:00 -1:00</td>
</tr>
<tr>
<td><strong>March</strong></td>
<td></td>
</tr>
<tr>
<td>1-4</td>
<td>ACSA Annual meeting, Boston</td>
</tr>
<tr>
<td>06 Tuesday</td>
<td>Architecture Faculty Meeting, 11:30</td>
</tr>
<tr>
<td>07 Wednesday</td>
<td>Architecture Cabinet Meeting, 12:00 – 1:00</td>
</tr>
<tr>
<td>11-17</td>
<td>Spring Break, no class</td>
</tr>
<tr>
<td>20 Tuesday</td>
<td>Tenured and Tenure Track Faculty meeting</td>
</tr>
<tr>
<td>21 Wednesday</td>
<td>Architecture Cabinet Meeting, 12:00 – 1:00</td>
</tr>
<tr>
<td>27 Tuesday</td>
<td>Curriculum Cmt. 12:00 -1:00</td>
</tr>
<tr>
<td>29-31</td>
<td>Graduate Open House</td>
</tr>
<tr>
<td>30-31</td>
<td>Digital Desires symposium</td>
</tr>
<tr>
<td><strong>April</strong></td>
<td></td>
</tr>
<tr>
<td>02-13</td>
<td>Advising for fall and summer</td>
</tr>
<tr>
<td>03 Tuesday</td>
<td>Architecture Faculty Meeting, 11:30, brown bag</td>
</tr>
<tr>
<td>04 Wednesday</td>
<td>Architecture Cabinet Meeting, 12:00 – 1:00</td>
</tr>
<tr>
<td>10 Tuesday</td>
<td>Curriculum Cmt. 12:00 -1:00</td>
</tr>
<tr>
<td>17 Tuesday</td>
<td>Tenured and Tenure Track Faculty mtg, 11:30-1:00</td>
</tr>
<tr>
<td>18 Wednesday</td>
<td>Architecture Cabinet Meeting, 12:00 – 1:00</td>
</tr>
<tr>
<td>20 Friday</td>
<td>Awards Day, 4:00 Steinberg</td>
</tr>
<tr>
<td>24 Tuesday</td>
<td>Curriculum Cmt. 12:00 -1:00</td>
</tr>
<tr>
<td>26 Thursday</td>
<td>Awards for Distinction</td>
</tr>
<tr>
<td>27 Friday</td>
<td>National Council Meeting</td>
</tr>
<tr>
<td>27 Friday</td>
<td>Last day of classes</td>
</tr>
<tr>
<td>30-2</td>
<td>Reading days</td>
</tr>
<tr>
<td>30-9</td>
<td>Final Reviews</td>
</tr>
<tr>
<td><strong>May</strong></td>
<td></td>
</tr>
<tr>
<td>01 Tuesday</td>
<td>Architecture Faculty Meeting, 11:30</td>
</tr>
<tr>
<td>18 Friday</td>
<td>Commencement</td>
</tr>
</tbody>
</table>