

## FALL 2009

### SPECIAL TOPICS

Undergraduate students enroll in ARCH 390; graduate students enroll in ARCH 790.

ARCH 390 LEC 001  
ARCH 790 LEC 001  
Architecture and Film  
Instructor: Mark Keane  
[keane@uwm.edu](mailto:keane@uwm.edu)

Lab/Lecture topics will range from early depiction of architectural environments, the representation and creation of visionary imagery that has impacted architectural practice, and developments in computer science creating new alliances between film and architecture. We'll post on YouTube, Wimp.com and Vimeo.

The department has (7) digital video units. Room 194 has (7) Adobe Premiere Pro editing suites. Mitchell 353 has both Final Cut Pro on their PC's and MAC editing suites.

Grading will be based on the following: 60% for two student team film, 20% for student presentation of building analysis or film analysis, 20% for attendance, student discussion and five required production scheduled times met. In order to cover the material set for this semester's course, we are suggesting a series of films for you to preview on your own time. All films should be available on video cassette or DVD.

ARCH 390 LEC 002  
ARCH 790 LEC 002  
Fabrication Methodologies  
Instructor: Gil Snyder  
[gsnyder@uwm.edu](mailto:gsnyder@uwm.edu)

ARCH 790 LEC 103  
Eppstein Uhen Revit/BIM Skills Workshop  
Instructors: Gil Snyder, James Dicker  
[gsnyder@uwm.edu](mailto:gsnyder@uwm.edu), [jdicker@uwm.edu](mailto:jdicker@uwm.edu)

PREREQUISITE: Concurrent enrollment in BIM Studio (ARCH 815). An expression of interest in the studio to [gsnyder@uwm.edu](mailto:gsnyder@uwm.edu) no later than 4/14. Students will be notified of acceptance no later than 4/17.

This graduate-level workshop will be taught by professional BIM trainers from the offices of Eppstein Uhen Architects, Milwaukee, and coordinated by Professors Dicker and Snyder. Students enroll in the seminar/workshop simultaneously with the BIM studio (ARCH 815, LAB 903). The seminar is taught in the offices of Eppstein Uhen Architects, 333 East Chicago Street, Milwaukee, Wisconsin 53202 using Autodesk® Revit® building software, that is available to students at no cost.

### DESIGN STUDIOS

Undergraduate students enroll in 600-level; graduate students enroll in 800-level studios.

ARCH 615 LAB 801  
ARCH 815 LAB 801  
UWM Solar Decathlon Project-Carbon Neutral Houses  
Instructor: Gregory Thomson  
[thomsong@uwm.edu](mailto:thomsong@uwm.edu)

[Net Zero Carbon + Net Zero Energy Design for Cold Climates](#)

The University of Wisconsin Milwaukee has been selected by the U.S. Department of Energy as one of 20 student teams from an international pool of universities to participate in the 2009 Solar Decathlon. The Solar Decathlon is a global contest in which university students compete to design, build and operate a solar-powered house more efficiently than other competitors. When the UWM House is completed in the fall 2009, it will travel to Washington, D.C., where it will be erected on the National Mall. At that time the project will be judged with the 19 other teams from around the world, and will be viewed by over 150,000 visitors, including officials from the U.S. Department of Energy, members of Congress, and the President of the United States, as well as other world leaders.

Students in the design studio will be working collaboratively with students of engineering and other disciplines to complete the construction of the building for the competition. These students will be an integral part of the success of the UWM entry into the competition. Following the competition, studio students will engage the issues and critiques of the project to develop new designs for the future of Net Zero Carbon + Net Zero Energy buildings in Cold Climates.

Students in the studio will be able to participate in all, or part of, a three-week field trip to Washington, D.C. to complete the competition. The Fall 2009 Solar Decathlon studio will emphasize the following aspects of the design and construction of the UWM entry into the Solar Decathlon Competition.

- [1] Complete the design and construction all elements of the building and verify their operation and performance.
- [2] Finalize the design, performance, and public outreach visualizations for the competition.
- [3] Deliver the building to Washington, D.C., where it will be erected and operated during the competition.
- [4] Return the building to Milwaukee and apply the lessons learned from the competition to the design of buildings to be Net Zero Carbon + Net Zero Energy Design in Cold Climates.

ARCH 615 LAB 803  
ARCH 815 LAB 804  
Tectonics of the Edge  
Instructor: James Dallman  
[dallman@ladallman.com](mailto:dallman@ladallman.com)

TECTONICS of the EDGE: a tone poem of water and land in three-acts

This studio will study the intersection of tectonics and landform, embedding a civic building in a highly charged site at the interface of landscape and water. Through the medium of construction, the studio will investigate building as transformed site, unearthing its topological structure as a source for design inspiration. The essential qualities of water, land, and culture, offer potential for a simultaneously knitted and radical form. The studio will pose the question of how architecture can act in a geometrically reciprocal relationship with its surroundings, and how it can confront the legacy of a constructed ground. How can construction be viewed as “topography’s perpetual becoming? (Leatherbarrow, Uncommon Ground, p.ix)”

The site, Lakeshore State Park, is a constructed ground, a new peninsula created in Lake Michigan from over 1 million tons of rock, excavated in the 1980s during the Milwaukee Metropolitan Sewerage District Deep Tunnel Project. The program involves a park visitor’s center intended to encourage recreational use and to educate visitors on the history of the site, including gathering spaces, restrooms, locker rooms, a swimming pool and a waters-edge boat slip.

ARCH 633 LAB 901  
ARCH 833 LAB 901  
Chicago Design Critic Studio  
Instructor: Neil Frankel  
[neil@frankelcoleman.com](mailto:neil@frankelcoleman.com)

This is a focused design studio directed by internationally known Chicago architect, Neil Frankel. As the centerpiece of the “Chicago Experience” this design studio connects the goals of design excellence in the context of a social research agenda. The program concept is based on demonstrating the inclusive role of design and applied social research for workplace effectiveness. The goal is to expand research as well as to further develop design skills as

students engage in studio work, interactive workshops, tutorials, field trip experiences and interaction with corporate leaders and architects throughout the region. The entire semester is spent in Chicago.

If interested in studying in Chicago during the 2009-2010 academic year, contact Neil Frankel at [neil@frankelcoleman.com](mailto:neil@frankelcoleman.com)

ARCH 635 LAB 801  
ARCH 835 LAB 801  
Historic Preservation Studio  
Instructor: Matthew Jarosz  
[mjarosz@uwm.edu](mailto:mjarosz@uwm.edu)

This studio focuses on the interrelated problems of historic preservation, adaptive reuse, and the design of new construction. These issues will be investigated through design interventions in complicated and controversial physical, social, and political settings. The purpose of the studio is to go beyond the hypothetical and to use real programs and real budget constraints to address matters of design, heritage research, technology, and building construction with extant buildings and environments. These existing conditions will not merely serve as the default backdrop for new design interventions, but will, in fact, determine the most appropriate reuse function and visual expression for a new generation.

This studio will be the introduction to a new way of understanding the role of the architect in the creation of livable environments. Design proposals will be less about individualism and more about responding to existing buildings, their material reality, the architects and artists responsible for their creation, and their importance as a cultural treasure. Analysis and synthesis will be both technical and theoretical, with design proposals that avoid neo-historicism and advance the matter of contemporary building technologies, just as the historic artifact that we are working with had done. This approach is the only way to generate truly creative, engaging, and appropriate reuse proposals. The semester will be divided into 2 major design projects and 1 short documentation project. It also will include a 2 day preservation study trip to Chicago.

**Project 1** will be an addition to Frank Lloyd Wright's Unity Temple in Oak Park, Illinois. We will be using a previously generated program and feasibility study that identifies the necessary components to accommodate new program and functions. The project will include an overnight stay in Chicago and a study of influential projects completed by Wright at that time. This 'preservation by addition' project will examine the theoretical and conceptual foundation of building design in an intense and challenging existing context of international importance.

**Project 2** will be a short 'charrette' type project and will only last 1 week. We will set out as a team to document a local landmark building using the National Park Service HABS documentation standards. That information will be submitted to the NPS for the annual Peterson Prize Competition. It will be an opportunity to understand historic building documentation and also serve as additional portfolio accomplishments to help strengthen future professional job opportunities.

**Project 3** will be a remodeling and addition project to an existing facility in the metro Milwaukee area. Though the specific site and program are yet to be determined, the project will pedagogically be different than the first project. We will be using an important building complex, but it won't be by an internationally famous architect. It will also be secular in nature, advancing the challenge of future commercial use, not religious. It will represent a design challenge circumstance that students will most likely encounter in their future professional practices.

ARCH 645 LAB 801  
ARCH 845 LAB 801  
New Orleans Studio  
Instructor: Harry Van Oudenallen  
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The studio is predicated on the idea that extended intense student site investigation for the design studio is best served when the sites are challenging, when the program has a strong social component, and when student's

senses are at full throttle allowing them to comprehend the seemingly incomprehensible. Such opportunities for students from Wisconsin are limited and the financial ability to go on more extended travel studies are few. Such rationale led to past studios with a focus on Mexico City, Guanajuato, the Netherlands, Spain, and Puerto Rico.

This year students will be traveling to New Orleans. The advantages of a “traveling” studio are well known. It is a “24-7” process that develops teamwork and collaboration and sets the stage for a productive and collaborative semester. New Orleans introduces the students to a “Gulf” culture and the design issues of a wholly different climate and culture. The studio is being organized in conjunction with the following institutions, Cornell, LSU, Tulane, University of Houston and the University of Puerto Rico-Rio Piedras. We will use a 9-11 day intensive investigation period in New Orleans from August 29 (Saturday) thru September 7 (Monday). The studio will develop a collective plan of attack, focus on the 9<sup>th</sup> Ward and develop a series of projects that respond to the plan.

New Orleans as a destination serves a second function. We would like to extend ties to other active universities in programs of exchange. This studio has traditionally worked with a school of architecture in the host countries to create the opportunity for peer level cultural exchange. New Orleans does contrast uniquely with Milwaukee.

The studio will produce a collective master plan, a series of urban development sites, and individual or team projects for each of the sites. The student will go through a full set of design considerations; site identification, program development, schematic design, design development, and the start of construction documents that articulate the details that contribute to the aesthetics of the design.

The project duration is for the entire semester, culminating in a class publication explaining the collective urban design as well as the individual building design interventions. They will stress the cross-cultural experience, the intensity of the cultural immersion, the completeness of the design, and the ability to work together with one’s peers. The year end class reviews will be held in a public venue, with invited professionals from the community and with the opportunity to present to many reviewers for comment and feedback. This review approach has proven successful in the past and generated a great deal of excitement in the school. The mere consideration of New Orleans as this year’s traveling studio destination, has already generated a good deal of excitement among the student population.

Cost estimate per student

Airfare	\$ 200
Housing	\$ 550
Food	\$ 275
Local transportation	\$ 50
Airport transport	\$ 40
Miscellaneous	<u>\$ 110</u>
Total per student	\$1,225

A non refundable deposit of \$300 will be required by May 29, 2009.

ARCH 645 LAB 802

ARCH 845 LAB 802

Building-Garden-Landscape

Instructor: Raymond Isaacs

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Traditionally there was a clear distinction between a building, its garden, and the landscape in which both were situated. During the early twentieth-century, this distinction was challenged. Spatial distinctions became more ambiguous.

The studio course will be centered on the dialectic between the existence and non-existence of the mentioned distinction. Students will design a network of spaces with different levels of climate control (that means some indoor, some outdoor and some in between) for an Urban Ecology Center situated along the Kinnickinnic River in South Milwaukee. With a project program emphasizing environmental education in a unique urban landscape, the

pedagogy of building design will be expanded to include landscape architecture and ecological design in light of contemporary urban environmental issues.

Another dialectic theme will be the “permanence” of architecture and the constant evolution of landscape. In this regard, the course will emphasize creating architecture and landscape design as non-static flows of atmosphere and experience. To stimulate thinking in this sense, students will explore and incorporate concepts from the fine arts, such as painting (impressionism, cubism, and expressionism), and music (time, rhythm, sequence, mood, and notation.) Works of artists such as Robert Irwin, Lawrence Halprin, and Michael Hedges will be discussed.

ARCH 685 LAB 801

ARCH 885 LAB 801

Multi-Cultural Museum: Lviv, Ukraine

Instructor: Thomas Hubka

[thubka@uwm.edu](mailto:thubka@uwm.edu)

#### The Architecture of Reconciliation: Ukrainians, Poles, and Jews-- Multi-Culturalism in Eastern Europe

The overall project goal is to design a new type of museum/workshop where historic wooden building restoration and multi-cultural education for the public are fully integrated. This museum/workshop is called a “Historic Restoration Workshop” and is intended to be a center for the “Restoration and Reconstruction of Monuments of Ukrainian/Jewish/Polish Culture.” The project site is located on a prominent site at the Museum of Folk Architecture and Everyday Life on the outskirts of the city of Lviv, Ukraine. The project has received the attention of officials from the City of Lviv, the Ukrainian government and public and private agencies and cultural organizations in the Lviv region. The specific purpose of the museum-workshop is to re-create and interpret destroyed monuments of Ukrainian culture and the first project of the workshop is to build an 18<sup>th</sup> century wooden synagogue from the small town of Gwozdziec in central Ukraine. (Hubka has written a book about this synagogue.)

Last September, five members of the previous studio went with Professor Hubka to Lviv, Ukraine for a one week design charrette with Ukrainian students exploring this project. There is a good chance that students would be invited to return to Lviv for one week to continue this project during the fall semester.

ARCH 685 LAB 802

ARCH 885 LAB 802

A Mortuary Complex

Instructor: Allen Washatko

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#### Hallowed Ground

This studio will explore the relationship between one’s personal philosophy on life and death and architecture. A single project will involve the design of a mortuary complex moving in phases from large scale site design to building design culminating in the small scale development of an individual space complete with furniture, finishes, lighting and detail drawings.

A mortuary complex has been chosen as the design challenge because of its intense questions and possibilities. It has had its own movements in the design world. At Modena it was Aldo Rossi’s statement on how we treat society’s abandoned living; at Pere LaChaise it is a romantic park and city unto itself with tree-lined cobblestone streets which gets 2 million tourists a year; and the Brion Cemetery in San Vito d’Altivole is a modern masterpiece and Carlo Scarpa’s defining work. A cemetery is not a graveyard, but a reaction against them. It is a campus, a village where some users are active and some are most definitely not, and like any architecture must accommodate all user groups.

This studio will call for design excellence at every phase of the work, as each phase will rely on the previous work done. The primary tool for evaluation will be the extent to which each student’s world view is translated into architecture.

The studio design methodology will include pattern writing as an extension to standard programming requirements drawing from Christopher Alexander's book the Nature of Order. Sustainability will also be an integral component in the design process.

ARCH 815 LAB 903

IP/BIM STUDIO

Instructors: Gil Snyder, James Dicker

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PREQUISITE: Concurrent enrollment in ARCH 790 LEC 103 Eppstein Uhen Revit/BIM Skills Workshop. An expression of interest in the studio to [gsnyder@uwm.edu](mailto:gsnyder@uwm.edu) no later than 4/14. Students will be notified of acceptance no later than 4/17.

Building Information Modeling (BIM) is rapidly becoming the tool of choice for building design, construction, and facility management. The graduate-level studio will focus on joining design and technology in a fully integrated environment. It will seek to underscore the development of appropriate strategies for working with BIM software, both as a powerful force for design and as a critique of contemporary practice, and its organization into collaborative systems of integrated practice (IP). The semester will be organized around the following:

1) a 6-credit design studio [ARCH 815 Studies in Architectural Technology and Theory: (IP/BIM Studio)] that is team-taught by Professors Dicker and Snyder in a dedicated studio located in the offices of Eppstein Uhen Architects, 333 East Chicago Street, Milwaukee, Wisconsin 53202;

2) a 3-credit BIM seminar/workshop [ARCH 790 Special Topics: [Eppstein Uhen Revit/BIM Skills Workshop]] taught by professional BIM trainers from the offices of Eppstein Uhen Architects, Milwaukee, and coordinated by Professors Dicker and Snyder. Students enroll in the seminar/workshop simultaneously with the BIM studio. The seminar is taught in the offices of Eppstein Uhen Architects, 333 East Chicago Street, Milwaukee, Wisconsin 53202 using Autodesk® Revit® building software, that is available to students at no cost.

A field study component is integrated into the studio and seminar with travel to New York City at the end of October. This will provide an opportunity to visit cutting edge professional practices employing IP/BIM, as well as to examine the role of IP/BIM in fabrication and construction through site visits.

ARCH 825 LAB 801 - Prerequisite: ARCH 516 or concurrent enrollment in ARCH 516

Liminal Space

Instructor: Chris Cornelius

[christc@uwm.edu](mailto:christc@uwm.edu)

UWM is currently undergoing a Master Planning exercise to determine the physical future of the campus. Many involved in the process contend that the current campus is at a spatial saturation level and there is no more room to expand in its current incarnation. This studio will challenge that notion and will look for opportunities to occupy spaces that would not normally or are otherwise overlooked as building sites.

Students will be asked to explore, develop and/or challenge building programs that the university is seeking to expand. When these programs are established by the individual students, they will select a site within the current UWM boundary, save Downer Woods, and develop design projects for the remainder of the semester. Portions of these designs will be explored through the construction document phase incorporating deployable structure, enclose, mechanical and sustainable systems.

ARCH 825 LAB 802 - Prerequisite: ARCH 516 or concurrent enrollment in ARCH 516

Building Enclosure

Instructor: Hanno Weber, Hanno Weber & Associates

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In the most utilitarian terms a building's enclosure serves as a filter or mediator between inside and out; it keeps out inclement weather, dirt and noise while providing view and ventilation and it controls the levels of daylight and sunlight admitted into habitable spaces.

The enclosing layer of a building, however, is more than a skin; it is the most visible manifestation from which we read and speculate about the occupants and activities within inhabited structures. Enclosing systems also convey the processes and materials used in supporting and constructing buildings, while providing references to the organization of spaces within. Furthermore, enclosure like other building systems such as the plan, the volumetric organization and the structure, can be seen as one more formal compositional order – generalized patterns that are derived from geometry and the timeless play of theme and variation.

This Comprehensive Design Studio addresses the Role of Enclosure as a primary concern by engaging the topic in case studies, a programming and conceptual design exercise and a schematic design problem that rely on the iconographic potential in the requirements of a small Long Term Urban Hotel to be located on a “left-over” site, South of the Manhattan Building on Congress Avenue in downtown Chicago. Subsequently the Schematic Design will undergo Design Development and in turn evolve into Preliminary Architectural Construction Documents and a detailed building segment model.

The studio's intention is to develop in the participants a literacy and confidence in designing based upon a consciousness and control of enclosure elements and their syntax as they contribute to the making of building form in specific contexts. The studio also seeks to convey and exercise in its assignments the related technical skills essential for the integration and implementation of the tectonic fabric in buildings.

Since the studio meets only once per week, on Tuesdays, the semester's work will follow a regimented schedule of assignments and their review that will take place weekly.