

## **SPECIAL TOPICS: 390/790**

***Undergraduates enroll in 390  
Graduates enroll in 790***

Topic: Architecture & Film  
Instructor: Keane

### Description:

Lab/Lecture topics will range from early FILM depiction of architectural environments, the representation and creation of visionary imagery that has impacted architectural practice, and developments in the digital age creating new alliances between film and architecture.

Students will need to access a video camera (any format) or 16mm camera for assignments. The department has (2) digital video units. The Media Center has (1) Adobe Premiere editing suite, and 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 student films will be part of the Friday Afternoon Live Lecture Series Annual Student Film Festival.

### Recommended Readings:

Atlas of Emotion, Bruno  
Cinema and Architecture, Penz and Thomas  
Architecture and Film Architectural Design Profile No 112  
Expanded Cinema, Gene Youngblood, 1970  
Film Form: Essays in Film Theory, Eisenstein 1949  
The Film Sense, Eisenstein 1942  
How to Read a Film, James Monaco 1981  
Architecture and Film, Lamster 2000  
Sets in Motion, Affron and Affron 1995  
Caligari's Cabinet and other Grand Illusions 1976

Topic: Eppstein Uhen Revit/BIM Skills Workshop  
Instructors: Dicker & Snyder  
PREREQUISITE: Concurrent enrollment in BIM Studio

### Description:

Building Information Modeling (BIM) is rapidly becoming the tool of choice for building design, construction, and facility management. The workshop 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. The semester will be organized around the following:

1) A 3-credit BIM seminar/workshop [ARCH 390/790 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 a dedicated SARUP computer lab using Autodesk® Revit® building software, which is available to students at no cost.

2) A 6-credit design studio [ARCH 615/815 Studies in Architectural Technology and Theory: (BIM Studio)] that is team-taught by Professors Dicker and Snyder in a dedicated SARUP studio;

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

Topic: Survey of Non-Western Architecture  
Instructor: Hubbard

### Description:

Survey of the most visually and conceptually significant examples of the traditional architecture of non-western cultures before the influence of Western architecture. Historical and religious contexts will be examined as background for the study of the architectural monuments.

The course is divided into three broad geographical and cultural categories: India and Southeast Asia, China and Japan, and Islamic countries.

Course Requirements include attendance, three short-answer quizzes, and three 4-page analysis papers .In addition, graduate students will prepare a 10-page research paper.

## **STUDIOS: 600/800-level**

***Undergraduates enroll in 600-level***

***Graduates enroll in 800-level***

ARCH 615/815 Studies in Architectural Technology and Theory

Subtitle: Digital Design

Instructor: Forseth

Description:

In today's architectural design studio, the computer is not just a drafting and rendering tool, it's often a sketching, modeling, and animation environment, a 3D prototyping machine, a communications device, a window onto virtual worlds, and, in some cases, a powerful tool for the generation of designs themselves. In short, all that is digital is gradually becoming an integrated studio design process completely onto itself. With that sobering thought in mind, the main purpose of this design studio is to create architecture with the aid of digital methods and media alone.

The semester divides into two parts: a six-week exploratory period of preparatory exercises followed by a main studio project. The preparatory design exercises are intended to explore new software methods and techniques. The early part of the semester is also intended to offer everybody in the studio an opportunity to assess each other's technical skill levels. In that regard, at least one preparatory exercise will explore a scripting language such as Ruby. Students with a knack for working with code and scripting are encouraged (but not required) to pursue that aspect of design in the main studio project.

Preparatory design exercises will address:

- 1.) 3D modeling, rendering and animation
- 2.) Free-form design (direct NURB transforms undertaken in a 3D modeling program) and generative design (aided by scripting, possibly incorporating shape grammars or algorithms for the generation of growth patterns in the development of form).
- 3.) Fabrication/rapid prototyping
- 4.) Digital image manipulation
- 5.) Collaboration (this may involve some online course activity)

The semester's main studio project will be an outside design competition.

Students who enroll in this studio should feel comfortable working with at least one 3D modeling program (preferably Rhino, Sketchup, Revit, or Microstation) and with Photoshop. Computer programming skills are not a prerequisite for taking this course.

ARCH 615/815 Studies in Architectural Technology and Theory

Subtitle: BIM Studio

Instructors: Dicker & Snyder

NOTE: Must also enroll in Eppstein Uhen Revit/BIM Skills Workshop (ARCH 390 for undergraduates, ARCH 790 for graduates)

Description:

Building Information Modeling (BIM) is rapidly becoming the tool of choice for building design, construction, and facility management. The 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. The semester will be organized around the following:

1) A 6-credit design studio [ARCH 615/815 Studies in Architectural Technology and Theory: (BIM Studio)] that is team-taught by Professors Dicker and Snyder in a dedicated SARUP studio;

2) A 3-credit BIM seminar/workshop [ARCH 390/790 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 a dedicated SARUP computer lab using Autodesk® Revit® building software, which is available to students at no cost.

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

An expression of interest in the studio to [gsnyder@uwm.edu](mailto:gsnyder@uwm.edu) no later than 4/15. Students will be notified of acceptance prior to 4/21.

## ARCH 615/815 Studies in Architectural Technology and Theory

Subtitle: Building Enclosure  
Instructors: Weber

### Description:

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 Design Studio addresses the Role of Enclosure as a primary concern by engaging the topic in case studies, a conceptual design exercise and two design problems that rely on the iconographic potential in the requirements of a small Long Term Urban Hotel and a Convention Hotel with the amenities of large gathering spaces. The small hotel is located on a “left-over” site, South of the Manhattan Building on Congress Avenue in downtown Chicago. The convention facility occupies an entire city block along Dearborn Street, South of the Monadnock Building, also in downtown Chicago.

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.

## ARCH 633/833 Chicago Design Critic Studio

Instructor: Frankel

### Description:

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

This design studio emphasizes the criteria, methodology and aspiration of Interior Architecture in a design strategy that will influence human performance in 21st Century Architecture.

A focused design studio directed by internationally known Chicago architect, Neil Frankel. The center of this design studio is the exploration of design strategy for Interior Architecture that informs the user of the building's values and purposes. The design problems require the interior architecture to be centered on the user's goals while expressing leading edge design recommendations.

This is part of a semester-long program based in Chicago. An expression of interest in the studio to [neil@frankelcoleman.com](mailto:neil@frankelcoleman.com) no later than 4/15. Students will be notified of acceptance prior to 4/21.

## ARCH 635/835 Studies in Architectural History and Precedent

Subtitle: Historic Preservation Studio  
Instructor: Jarosz

### Description:

The Historic Preservation Studio is required for a student to receive the Certificate in Historic Preservation but is open to all graduate and advanced undergraduate candidates.

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 will include a 2 day preservation study trip in 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 remodeling and addition to St. Mark's parish complex off Downer Avenue at the corner of Bellevue and Hackett. CSD, Community Design Solutions at SARUP, has worked with the parish building committee for the past year to identify needs and to create a feasibility study for future remodeling and expansion. The committee has decided to engage the Historic Preservation Studio to transform that program criteria into schematic design proposals. The studio will generate proposals for the existing adjacent open lot, owned by the parish, that incorporate new activity and spiritual space, business and office expansion, parking accommodations, residential units, retail or community space, and other program components that address needs and generate revenue. A selected scheme will be advanced as the basis for an actual building project to be executed by a professional office.

#### ARCH 645/845 Studies in Urban and Community Design Theory

Subtitle: Puerto Rico Studio

Instructors: VanOudenallen & Manley

#### Description:

This course focuses on design in the context of Puerto Rico. There will be one full semester project, dealing with issues of urban design, mixed use programming, building design and development, and constructability. The project will be developed in a contemporary manner, as if built today given the circumstances of construction in Puerto Rico, which for the whole is very comprehensive, rich, and full of good craft. It is the intent to have the work made into a publication for distribution and for each of the students to have. The booklet will indicate the quality and quantity of work performed during the full semester.

#### COURSE STRUCTURE, REQUIREMENTS, AND GRADING

The course has two sections, one group emphasis, and another in single or small team building development. The studio format will alternate between individual desk crits and group pin-ups. The assignment will count for 80% of the final grade, while 20% will count for participation in class during the assigned time of the course. The site will be a mutually agreed upon selection process with the faculty while doing the extensive site visit and investigation in Puerto Rico. All information about the site, its topography, its legal boundaries, its design potential, photos, contours, etc. will be gathered during the site visit to Puerto Rico at the beginning of the semester. To make this process effective each student will be asked to contribute their site research to the rest of the class during the project period. That contribution to the class and the documentation will be noted in the 20% of the grade which records degree of participation in the class.

#### ATTENDANCE and PARTICIPATION

In the studio students are encouraged to ask questions and participate in any discussion. Students are expected to be in class for all regularly scheduled meetings. A medical excuse will be required for any make up time.

#### GENERAL GRADING POLICY

All work will be graded for graphic and/or verbal clarity, quality of the work, and completeness of the requirements for the semester project. No late work will be accepted unless accompanied by a written and signed medical note.

#### READING AND REFERENCE MATERIALS

The University Library has an extensive collection dealing with the history and development of Puerto Rico and the importance the United States has played in the governance of the country. This collection can be a great source of design inspiration, and also full of insight as to the architecture of Puerto Rico and the Caribbean as a whole. Contemporary Puerto Rican architects have delved into the interpretations of building form and construction of the past and often very successfully produced an architecture related to its history, functional in modern society, and yet aesthetically continuous with the past. During the course of the semester you will be introduced to the works of these architects. Their work will provide insight into how to solve your own design problems. Puerto Rican architecture is very different than the American experience and its interpretation of the elements of building, their function, and

symbolism will be different as well. Developing an understanding of this will be critical to a successful semester. The studio will develop a class library to be shared during the course of the semester.

#### ARCH 685/885 Studies in Building Typology

Subtitle: Auditoria Redux: a study in material, form, and experience

Instructor: La

##### Description:

This studio is a focused investigation of collective gathering space, the auditorium. An auditorium is the site of performance, is inherently ephemeral, and is a shared yet isolated experience. That the auditorium represents the conscious, civic act of assembly is, on the one hand, universally understood and seemingly significant. However, a great number of recent examples of this typology appear mundane and spatially neutral. Is this symptomatic of an over-emphasis on flexibility or complexity of program? Or on a generic material palette? How is the very nature of performance changing and evolving? What are the imagined, technology advancements of the future and how could this knowledge become integrated in auditoria?

Related to the questions above, what is the foil to the auditorium itself and how can we design this backdrop? For example, in the Paris Opera House, it is no wonder that "Garnier's own naively confident description of his double theatrical masterpieces is likely to fill us with a certain nostalgia..."<sup>1</sup> The modernist resistance to the inauthentic qualities of Garnier's highly ornamented space presents a conundrum to the designer wishing to impart greater meaning and elevated experience to the making of this assembly space (all the while conscious of Nietzsche's understanding of "the essential inauthenticity of the theatre."<sup>2</sup>). While the space of the auditorium is a highly contrived, even privatized experience, this studio will investigate auditoria as symbolically, culturally, and physically potent spaces-- spaces that are capable of effecting the collective identity and image of the city. The auditoria will be considered a "set of perceptual transformations,"<sup>3</sup> a performative space (activated by human use and occupation<sup>4</sup>), as well as a space for performance.

We will begin with a study of the history and nature of gathering spaces. We will project this knowledge onto the design potential of auditoria of the future. Simultaneously, we will investigate technical advances in material research, as well as formal strategies that may enrich spatial experience. The studio will consist of group and individual design work, as well as research and testing of ideas in drawings and models. The studio will also engage field studies and invited speakers/critics.

<sup>1</sup> Karsten Harries, "Theatricality and Re-presentation," *Perspecta 26* (New York: Rizzoli, 1990), p.26.

<sup>2</sup> Ibid, 25.

<sup>3</sup> Behavior, Performance Space, an interview with Richard Schechner," *Perspecta 26* (New York, Rizzoli, 1990), p. 97.

<sup>4</sup> Jill Sebastian, "On the Fuzzy Edge Lecture Series," MIAD, Spring Semester 2003.

#### ARCH 685/885 Studies in Building Typology

Subtitle: Jewish Historical Museum – LVIV, Poland

Instructor: Hubka

##### Description:

This studio will explore the difficult issues of memorial, remembrance, and reconciliation associated with the destruction of Ukrainian Jewry by the Nazis during World War II. Students will be asked to design a museum and visitor center for Jewish remembrance at a prominent site near the entrance to the Museum of Folk Architecture and Everyday Life, Lviv, Ukraine. Rather than specifically recalling the destruction of the Jewish community, as in most Holocaust memorials, this museum/restoration workshop is intended to recall, through exhibits and building restoration, the history and life of the Ukrainian Jewish community before its destruction.

##### Program:

This studio will ask students to design: 1) a museum of Ukrainian Jewish history, and 2) a large workshop/factory for the rebuilding of an 18<sup>th</sup> century wooden synagogue and other historic wooden monuments. The overall project goal is to design a new type of museum/workshop complex where historic wooden building restoration, memorial remembrance, and multi-cultural education for the public are fully integrated.

This is not a hypothetical project but is a program with a selected site that has been developed in cooperation with the Museum of Folk Architecture, the Department of Architecture, Lviv University, and cultural organizations from the city of Lviv, Ukraine. Because of international interest, there is a good chance for regional and international exhibition of the studio designs and even the possibility that several students could travel to Ukraine during October or November with the instructor to exhibit preliminary design work proposals and to discuss their designs with Ukrainian architects and students.

Studio text:

The book, *Resplendent Synagogue: Architecture and Worship in an Eighteenth Century Polish Community*, written by the instructor, will be the primary text for the studio. Lectures, some by visiting faculty, following the book's chapter organization, will analyze the art, architecture, and culture of the Ukrainian Jewish community. A publicized final review is planned perhaps with invited scholars including members of Milwaukee's Jewish, Polish, and Ukrainian communities.

ARCH 825 Comprehensive Design Studio

Subtitle: Solar Decathlon

Instructor: Cornelius

Description:

The Solar Decathlon Studio for Fall 2008 will be part of the on-going two year project that SARUP has been selected to participate in. In this studio, students will be working on the beginnings of the Construction Document phase of the project. Students will be working as a studio-wide team in order to complete this task. Duties may include material research, detail investigations and cost analysis. The SARUP Solar Decathlon team includes individuals from the College of Engineering and the students in the Solar Decathlon studio will be working with faculty and students in the Mechanical Engineering and Electrical Engineering departments. Throughout the semester, students will be evaluating and testing the performance of the design building systems; structural, HVAC and Electrical/PV.

For more information, contact the instructor at [christc@uwm.edu](mailto:christc@uwm.edu).