

## **SYLLABUS**

### **Arch 605aL GRADUATE ARCHITECTURE DESIGN - Integration**

6 Units MWF, 2:00PM - 5:50PM

Prerequisites: Arch 505a/b, Open to graduate level architecture majors only.

## **INTRODUCTION**

Arch 605a is the third of four "Core Studios" required by the M. Arch professional degree program. The sequence of Core Studios is orchestrated towards building a comprehensive set of abilities and knowledge towards training students towards the professional practice of architecture including the fulfillment of National Architectural Accrediting Board (NAAB) requirements. Core studios are followed by two Advanced Topic Studios where a broader range of topics are explored.

## **STATEMENT**

This studio requires the skills, knowledge, and methods developed in previous semesters. As in previous semesters, the diagram is critical to processing design through analytical, generative, and developmental realms. The diagram will maintain its key role in the exploration and communication strategic attitudes in synthesizing program, context, and concept. Its use will be an important component of the pedagogic environment, expressing intentions, documenting process, and finally as a visual statement of the reasoning supporting the product of the semester's work.

Architectural syntax will also remain critical to the execution of design. It asserts that the material manipulation of form, surface, and space actively shapes organization, engagement, and experience. Arch 605a takes the building from such intentions of conceptual, perceptual, contextual, and programmatic performance to one that acknowledges and responds to the physical, mechanical, and practical realities in the execution of architecture. Here we will seek to understand how the physical matter and mechanics of a building support the functional execution of a performative architectural syntax. Development will require students to demonstrate the strategic application of building systems. Basic principles of structural (seismic/wind and gravity), HVAC, building envelope, access/egress, building service systems; and sustainable strategies are critical to the proper execution of performative goals. The integration of building systems will be delineated to demonstrate the tectonic viability of the design solution.

## **COURSE OBJECTIVES**

This studio addresses a set of key NAAB "Student Performance Criteria" (SPC), a set of skills and knowledge that students must demonstrate to earn an accredited degree (NAAB based objectives); and goals specific to the M. Arch program's curricular agenda, "Studio Objectives".

**NAAB based objectives** (the letter and number designation correspond to NAAB's SPC listings) :

**To demonstrate an ability to perform:**

- *A.2. Design Thinking Skills: Ability to use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions.*
- *A.5. Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.*
- *A. 7. Use of Precedents: Ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.*
- *B.1. Pre-Design: Ability to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.*
- *B. 2. Accessibility: Ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.*
- *B.3. Sustainability: Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon--neutral design, bioclimatic design, and energy efficiency.*
- *B. 4. Site Design: Ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.*
- *B. 5. Life Safety: Ability to apply the basic principles of life-safety systems with an emphasis on egress.*

- **To demonstrate an understanding of :**

- *A.4. Technical Documentation: Ability to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design*
- *A. 8. Ordering Systems Skills: Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.*
- *B.6. Comprehensive Design: Ability to produce a comprehensive architectural project that demonstrates each student's capacity to make design decisions across scales while integrating the following SPC:*
  - A.2. Design Thinking Skills*
  - A.4. Technical Documentation*
  - A.5. Investigative Skills*
  - A.8. Ordering Systems*
  - A.9. Historical Traditions and Global Culture*
  - B.2. Accessibility*
  - B.3. Sustainability*
  - B.4. Site Design*
  - B.5. Life Safety*
  - B.8. Environmental Systems*
  - B.9. Structural Systems*
- *B. 7 Financial Considerations: Understanding of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.*
- *B.8. Environmental Systems: Understanding the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, day lighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.*
- *B. 9. Structural Systems. Understanding of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.*
- *B. 11. Building Service Systems: Understanding of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems.*
- *C. 3 Client Role in Architecture: Understanding of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.*
- *C.7. Legal Responsibilities: Understanding of the architect's responsibility to the public and the client as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.*
- *C.8. Ethics and Professional Judgment: Understanding of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues in architectural design and practice.*
- *C.9. Community and Social Responsibility: Understanding of the architect's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors*

The USC School of Architecture's five year BARCH degree and the two year M.ARCH degree are accredited professional architectural degree programs. All students can access and review the NAAB Conditions of Accreditation (including the Student Performance Criteria) on the NAAB Website, [http://www.naab.org/accreditation/2009\\_Conditions.aspx](http://www.naab.org/accreditation/2009_Conditions.aspx).

#### **STUDIO OBJECTIVES:**

- *To exercise skills critical to the architectural discipline, including: delineation/representation, digital skills, use of precedents, communication, collaboration, and presentation.*
- *To provide a methodology of transformation and generation, that can inform the design process, and to utilize the theme of geometry and performative form as a common armature for diverse lessons and phases.*
- *To critically examine context and program in order to generate criteria that are performative in both technical and human experience terms.*

- *To understand the tectonic requirements of building design, and to implement tectonic solutions to resolve structural, environmental control, and sustainable resource management issues, and be able to express this implementation in the delineation of the design.*
- *To pursue a design that engages the environment in a way that dramatically reduces or eliminates the need for fossil fuel.*
- *To develop and nurture an advanced vocabulary of terms associated with the syntax of graphics; form/geometry/organization and its articulation/manipulation; and performance.*
- *To accomplish the program's topical directives in scholarship and skills.*

## **SEMESTER STRUCTURE**

The sample schedule (attached) is based in the following 6 phases:

**Phase 1: Context: Documentation, Research, Analysis.** This phase will document the context through digital and physical modeling of the site and its surrounding context. Program analysis will engage the needs and aspirations of the client with the social, cultural, urban, and infrastructural opportunities of the context. Site analysis will address specific research topics, data/documentation through observation. The synthesis of basic topics will seek new patterns of opportunities. Diagrams will be intensively used. This along with documentation will exercise your skills in delineation and modeling. These will directly inform performative goals for the project. This phase will also analyze the site through the exploration of surface, form, and topography as conditioned through the engagement program and context.

**Phase 2: Schematic Development.** Starting with the development performative intentions, students will synthesize analysis, abstraction, and intention into order, performance, movement, and activity as manifested in physical form. Later in this phase tectonic and systems development is incorporated into the process, and intentions become a building. Midterms come at the end of this phase.

**Phase 3: Development.** No longer is the process about lateral explorations into different schemes, but rather how to develop the project into a building that can be built. Issues of structure, building systems, code are integral to this phase.

**Phase 4: Revision and Detailed Development.** Students incorporate feedback towards the final refinement of design. Here, structural design is tested and refined and building tectonics, finalized.

**Phase 5: Plan Check** (concurrent with final design refinement). Through a "Plan Check" process, instructors will check that all required SPC related issues are satisfactorily demonstrated in your design and diagrams.

**Phase 6: Production and Final Requirements.** Here while students produce the product for final turn in and presentation.

## Arch 605aL GRADUATE ARCHITECTURE DESIGN

### SEQUENCE AND SAMPLE SCHEDULE

There are 15 weeks of classes leading up to the completion of the final project). Exercises and lectures are enumerated by the week they occur or are issued (Exercise 3 (EX03) will be issued during Week 3, Lecture 3 will occur Week 3). All noted dates are subject to change. Please check Blackboard for revisions.

*Note critical academic dates (in italics),*

#### PHASE 1: Context

Documentation, Research and Analysis

#### Week 1 Documentation, Research and Analysis

*Students are introduced to the semester, and hit the ground running with research and site documentation.*

Mon.	<b>Introduction to the semester, semester project and site.</b> Studio Assignments
Wed.	<b>Assignment: EX01, Documentation, Research and Analysis</b>
Fri.	<b>Site Visit</b>

**Reading Assignment:** Soja, Edward W., "Introduction to Los Angeles: City and Region", Scott, Alan J., Soja, Edward W. [ed], The City, Los Angeles and Urban Theory at the End of the Twentieth Century p1-23, Berkeley, 1996 *(reader) A good introduction to the early history of Los Angeles.*

#### Week 2 Documentation, Research and Analysis (continued) and Exercise

Introduction to project and start site analysis and site documentation.

Mon.	<b>No class, Labor Day</b>
Wed.	Lecture 2: Context Lenses and Filters: Exercise Introduction <b>Assignment: EX02: Lenses and Filters</b>
Fri.	<b>EX01 Documentation, Research and Analysis Pinup and Presentations</b>

**Reading Assignment: TBA**

#### Week 3 Lenses and Filters (continued)

Mon.	Desk Crits
Wed.	<b>Desk crits, Lecture: Context</b>
Fri.	<b>EX02 due pinup</b>

#### PHASE 2: Schematic Development

Massing, Organization, and Scheme Development

#### Week 4 Performance, Organization, Concept

Students will investigate how internal influences (program adjacencies, sequence and experience, and imposed narratives) form organizations; and how contextual forces, movement, program, and the natural environment generate corresponding organizations for the new program. Here students will also formalize (in word and form), their intentions and strategies. By the end of this week students

should have a solid grasp of the performative intent of the building, and diagrams that illustrate how to accomplish their goals.

**Mon.**

**Issue Semester Project**

**Assignments:** EX04 Client Role (SPC C.3)

**Wed.**

**Lecture 4: Program Fitness**

Progress and Pinup: Multiple programmatic, massing organizations.

Statement of recommendations, program strategy, how organization will respond to client needs

**Fri.**

Desk Crits

**Reading Assignment:**

Dovey, Kim and Dickson Scott, University of Melbourne; Architecture and Freedom? Programmatic Innovation in the Work of Koolhaas/OMA; Journal of Architectural Education Volume 56, Issue 1, pages 5–13, September 2002 (reader)

Baudrillard, Jean; The System of Objects; Verso, 2005 (reader)

Tschumi, Bernard; The Manhattan Transcripts, St. Martin's Press, 1982 (Reader)(revisit)

**Week 5**

**Formal Spatial Solutions**

Organizations evolve to formal and spatial constructs, that define how view, light, movement, activity, and experience begin to frame the program. Students will produce multiple formal, spatial, movement models starting at the site scale.

**Mon.**

Review of organization schemes in site model

**Wed.**

Lecture 05: Process

**Fri.**

Desk Crits

**Reading Assignment (tentative):**

Calvino, Italo. Invisible Cities; Giulio Einaudi Editore, 1972 (reader)

Edgar Stach, Form-Optimizing Processes in Biological Structures. Self-generating structures in nature based on pneumatics. *(Reader) Writing focuses on the concept of self organization as a defining principle in nature and, in particular, on the mathematical, geometrical and physical properties of bubble clusters and shows examples from nature, biology and engineering.*

Lynn, Greg. Folds Bodies & Blobs Collected Essays. La Lettre Volee, July 1998 p.108-133 (Reader). *Discusses a taxonomy of form and meaning.*

**Week 6**

**Focus**

Development towards a single conceptual direction, preliminary siting and massing, program organization to scale.

**Mon.**

Desk Crits

**Wed.**

Desk Crits

Lecture 06: *Circulation and Code Issues*

**Assignment:** EX06, Egress Access (SPC B.5)

**Fri.**

Desk Crits

**Reading Assignment:**

Hillier, Bill and Vaughan, Laura; "The City as One Thing" (reader)

Ching, Francis and Winkel, Steven R; Building Codes Illustrated, a Guide to Understanding the 2000 International Building Code; John Wiley and Sons, 2003 (Reader and library reserve).

Tubbs, Jeffery S; Egress Design Solutions: a Guide to Evacuation and Crowd Management Planning; John Wiley and Sons, 2007. P 71-73, 76-79

### PHASE 3: DEVELOPMENT

From Scheme to Building

#### Week 7

##### **Intensify: Scheme Development: Form, Space, Material**

Jump scales, building materiality as agents of performative criteria. How any architectural element performs non-arbitrary actions upon the building or building experience.

**Mon.**

Desk Crits

**Wed.**

Lecture 07: *Building System Factors during Schematic Design*

**Assignment:** EX07.0: Dimensions (SPC B.6, B.9)

EX07.1: Site Design (SPC B.4)

**Fri.**

Desk Crits

##### **Reading Assignment:**

Bjorn Sandaker et al., *The Structural Basis of Architecture*, Ch. 1. (reader)

References: Structures lectures 2, 3 and 21 (Blackboard)

Reading Reference: Allen, Edward and Iano, Joseph; *The Architect's Studio Companion: Rules of Thumb for Preliminary Design*; Various excerpts.

#### **Week 8 Pre mid-term development and Production.**

**Mon.**

Desk Crits

**Wed.**

Lecture 08: Intro to assignment

**Assignment:** EX08 Code Check, Area Analysis, Cost (SPC B.7)

**Fri.**

Desk Crits

#### Week 9

##### **Midterms**

Schematic Design Level of Resolution 1/16", requirements to be announced.

Organizational diagrams, program, sequence, form resolved. Material transparencies + opacities shown, physical model.

**Assignment: Due Monday** for discussion (individual instructors may change due date): Critical notes and sketches on design project, strategy for design revision

**Mon.**

Desk Crits

**Wed.**

MIDTERM REVIEWS

**Fri.**

MIDTERM REVIEWS

### PHASE 4: Revision and Detailed Development

#### **Week 10**

##### **Schematic Design Revision.**

**Mon.**

Due: First Digital Archive Submittal

**Wed.**

Lecture 10 : Structural Considerations and Strategies

**Assignment:** EX10: Stressed, Structural Analysis and refinement (SPC B.9)

**Fri.**

Desk Crits

##### **Reading Assignment:**

*Lateral Forces Study Guide*(reader)

*Conceptual Structural Design Lectures 1 and 2* (reader)



**Week 17**      **Final reviews**

**Mon.**                      **FINAL REVIEWS**

**Tue.**                      **FINAL REVIEWS**

**Wed.**                      **FINAL REVIEWS Portfolio and Digital Archives Due (tentative date, final time to be confirmed)**



## Arch 605aL GRADUATE ARCHITECTURE DESIGN

### BIBLIOGRAPHY

This is the comprehensive bibliography for the semester. Students will be informed of additional readings associated with exercises and phases. Items that are on reserve in the library or contained in the required reader are noted. Readings may be added to the list as the semester progresses. **Please check Blackboard for availability of digital reading matter and updated bibliographies.**

Allen, Stan; Essay: "From Object to Field" from *Points + lines: diagrams and projects for the city*; Princeton Architectural Press, 1999 (Reader)

Allen, Edward and Iano, Joseph; *The Architect's Studio Companion: Rules of Thumb for Preliminary Design*; Wiley; 2006 (recommended purchase)

American Institute of Architects, and Rush, Richard D (Editor); *The Building Systems Integration Handbook*; Butterworth-Heinemann; 1991

Borden, Matter, Routledge Press 2011

Charleson, Andrew; *Structure as Architecture : a source book for architects and structural engineers*; Architectural Press, 2005 (Reader and Library Reference)

Ching, Francis, and Adams Cassandra; *Building Construction Illustrated*; John Wiley and Sons Inc, 2001

Ching, Francis and Winkel, Steven R; *Building Codes Illustrated, a Guide to Understanding the 2000 International Building Code*; John Wiley and Sons, 2003 (Reader and library reserve).

Cook, Peter. *Drawing: the motive force of architecture*. Chichester: John Wiley & Sons, 2008.

Dovey, Kim and Dickson Scott, University of Melbourne; *Architecture and Freedom? Programmatic Innovation in the Work of Koolhaas/OMA*; *Journal of Architectural Education* Volume 56, Issue 1, pages 5–13, September 2002

Engel, Heino; *Tragsysteme / Structure systems*; Hatje Cantz, 2007.

Hertel, Heinrich, *Structure, Form, Movement*. Katz, Milton S. (Trans). [1st English language ed.], Reinhold, New York, 1963

Hillier, Bill and Vaughan, Laura; "The City as One Thing", essay, found at [www.bartlett.ucl.ac.uk/graduate/research/space/space-syntax](http://www.bartlett.ucl.ac.uk/graduate/research/space/space-syntax) (Reader)

Kwok, Alison G., and Grondzik, Walter T. *The Green Studio Handbook*; Elsevier Science, 2006 (TH880.K87 3hour loan from Circulation Desk Shelving area behind the Circulation Desk)

Moussavi, Farshid; Editors: Daniel López, Garrick Ambrose, Ben Fortunato, Ryan Ludwig, Ahmadreza Schrickler; *The Function of Form*; Actar and Harvard Graduate School of Design, 2009

Patterson, Terry; *Illustrated 2009 Building Code Handbook*; McGraw-Hill Professional Publishing; 2009

Ramsey, Charles George, and Sleeper, Harold Reeve; *Architectural Graphic Standards* (Various Editions); John Wiley & Sons Inc (recommended resource for building standards)

Schierle (2008) *Structure and Design*, University Readers.

Siegel, Curt, Translated by Thomas E. Burton; *Structure and Form in Modern Architecture* [Strukturformen der modernen Architektur. English]; Krieger Publishing Company, 1962

Tschumi, Bernard; *The Manhattan Transcripts*, St. Martin's Press, 1982 (Reader)

Tubbs, Jeffery S; *Egress Design Solutions: a Guide to Evacuation and Crowd Management Planning*; John Wiley and Sons, 2007. P 71-73, 76-79, Chapter 4 Prescriptive Egress Concepts p 133-181

Tufte, Edward R. *Envisioning Information*. Utica: Graphic Press, 1990.

Tufte, Edward R. *The Visual Display of Quantitative Information*. Utica: Graphic Press, 2001

Van Berkel, Ben. *Move: Diagrams*, Three volume set. Goose Press, Netherlands, Jun 1999 p.385-386

Alex Wall, "Programming the Urban Surface," in Corner, ed., *Recovering Landscape*, 237. Princeton Architectural Press, 2006

Watts, Andrew. *Modern Construction Handbook*. Springer, 2011 (Library Reserve)

## IMPORTANT CONSIDERATIONS AND REQUIREMENTS

**Studio meeting hours** are Monday, Wednesday and Friday from 2:00PM to 5:50PM. Be on time.

**Mandatory all-studio lectures** will occur once a week during studio hours. You are strongly encouraged to attend all lectures in the School of Architecture Lecture Series.

**Studio participation** is critical to both individual and collective success. When not actively engaged with your instructor, be working in studio and available for spontaneous discussions and feedback.

**Course Information and Updates:** all instructor issued material: course information, exercises, course handouts, readings, lectures, updates to syllabi and schedules, and more; will reside online on Blackboard, [blackboard.usc.edu](http://blackboard.usc.edu). Knowledge of updated course material is expected of all students. Check Blackboard weekly.

**Documentation** is critical as a record of your process and a demonstration of your graphic and written communication skills. You will produce a portfolio that documents the work of this studio, to be submitted following final presentations for evaluation by the studio faculty.

**Digital archive:** You are required to submit a digital archive at both midterm and the end of the semester. Review with your instructor a selection of the best images / drawings / photos, and carefully follow all naming and formatting protocols. This is the official USC School of Architecture archive of your work, which also offers the opportunity to have your work considered for future school publications.

**Organization:** Keep your digital collections organized so references such as Blackboard downloads and research materials are easy to find. Keep your hard-copy materials organized too, preferably in a binder.

**Back up your digital files regularly.** Protect against corruption and loss, as missing digital production is not grounds for submitting late work.

**Digital skills** will be integral to the design process, students are required to develop these skills independent of studio instruction or studio time.

## READINGS

A course reader has been prepared and is required reading. Additional materials may be distributed or posted on Blackboard throughout the semester. You are responsible for completing all readings and discussing them in class. Theoretical, historical and referential contexts are critical factors in the production of intelligent architecture.

## EVALUATION AND GRADING

Each design project will be evaluated in a public review and graded by the studio faculty individually and collectively using common procedures consistent with the intentions of the curriculum. Your semester grade will be based on a weighted evaluation of the phases described in the detailed schedule and the final presentation and portfolio. Weighting of grade is as follows:

	Percentage of Grade
Exercises	20
Midterm	20
Final Project	45 (final review)
Portfolio and digital submittal	10
Participation	5

Unsatisfactory performance reports will be issued to students whose work is not satisfactory. Remember that an incomplete grade (IN) is limited by University policy to cases of extended documented illness or family emergency involving a passing-level student in the last weeks of the semester.

University guidelines relative to plagiarism pertain to original design work. You are expected to do all of your own design and presentation work. Assistance received, in the form of model construction, drawing preparation, or the flagrant appropriation of the design work of others will be considered as non-original work and will be treated as plagiarism.

## GENERAL PROTOCOLS AND CLASS ATTENDANCE

**Work in Studio:** You must set up and maintain an appropriate work area. You are strongly encouraged to work during non-class hours in studio to benefit from the studio environment and interaction with fellow students and faculty. Informal discussion and exchange of ideas with classmates is encouraged.

**Work Outside of Class:** Budget a minimum of two hours of work outside of class for each class hour. Note that this is a minimum commitment of 24 hours a week in addition to the 12 hours of studio class time.

**Assignments:** Main project assignments will be handed out in writing. Other assignments will be given verbally or in writing and may vary by section. Timely completion of all assignments is critical to your success in this studio.

**Reviews:** Reviews are one of the most important elements of your architectural education. Full participation is required at all reviews: you are expected to be attentive, engaged and to participate from the beginning until the end of each review.

**Attendance:** due to the nature of design studio, attending all class meetings is imperative. No absences will be excused without proper documentation. Late arrivals, disappearances or early departures will be considered absences. Three or more unexcused absences can lead to failure of the course, even if the coursework is completed and deadlines are met.

## STUDIO PROTOCOLS

1. If you wish to listen to music, please use headphones.
2. Cell phones are to be turned off during studio hours.
3. Studio time is not to be used for email correspondence or Web surfing.
4. Food and drink are discouraged in studio: One spill can jeopardize many hours of effort.
5. Do not use spray paint or spray adhesive inside the studio or in the building. When using such materials outside, always use the available brown kraft paper as a drop cloth to avoid overspray.
6. Always have an architectural scale and tracing paper available for desk crits, and if requested by instructor, hard copies of progress.
7. You are encouraged to work with computer-integrated design, but the complications and unpredictable nature of CAD are not an acceptable excuse to miss class, not be working during studio time, or not have drawings for critiques because of computer malfunctions. It is your responsibility to have hard copy for each critique, printed out to an appropriate, measurable scale.
8. All drawings, models, and other work for final reviews must be printed, complete, and handed in or checked off in the studio at the announced hand in date.. NO EXCEPTIONS. Additional work may be done for portfolio submission due at the end of finals period – the date and time to be announced.

## DISABILITY SERVICES AND RELIGIOUS HOLIDAYS

Any student requesting academic accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to the studio instructor as early in the semester as early as possible. DSP is located in STU 301 and is open 8:30 a.m. - 5:00 p.m., Monday through Friday. The phone number for DSP is (213) 740-0776.

The university recognizes the diversity of our community and the potential for conflicts involving academic activities and personal religious observation. The university provides a guide to such observances for reference and suggests that any concerns about lack of attendance or inability to participate fully in the course activity be fully aired at the start of the term. As a general principle students should be excused from class for these events if properly documented and if provisions can be made to accommodate the absence and make up the lost work.

Constraints on participation that conflict with adequate participation in the course and cannot be resolved to the satisfaction of the faculty and the student need to be identified prior to the drop add date for registration. After the drop add date the University and the School of Architecture shall be the sole arbiter of what constitutes appropriate attendance and participation in a given course." Any student concerned about missing class for a recognized religious holiday should bring this matter up with your instructor in the next week. A list of recognized religious holidays may be found at:

[http://www.usc.edu/programs/religious\\_life/calendar/](http://www.usc.edu/programs/religious_life/calendar/).

## RETENTION OF STUDENT WORK

All work submitted for credit shall become the property of USC. Students will, in accordance with portfolio requirements for the course, record their work. Portfolios in addition to fulfilling a studio requirement will serve as a personal record of each student's work.

## DIGITAL SUBMITTALS

During the semester, assignments may have a required digital submittal component.

At the end of the semester all students will be required to submit a CD or DVD of their semester's work as a digital archive.

The archive will have very specific requirements for nomenclature and organization. Requirements will be issued at a later date.