ARCH 3012_001  ARCHITECTURE DESIGN STUDIO VI
SYLLABUS_AKINS

Edwin E. Akins, II

SPRING 2015

Contact Information
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Course Name and Number
Architectural Design Studio VI: ARCH3012-001
Course Hours: MWF 2:00 – 5:50 (note: some sessions include the KSU_ARCH lecture)

Prerequisites
Completion of ARCH 3011 (Architecture Design Studio V)

Course Description
The primary pedagogical focus of this studio is to produce a design project that demonstrates increased maturity in architectural processes and system applications. This course is a continuation of ARCH 3011 and the integration of systems, materiality, and architectural thinking into the design process.

Students will design a mid-rise project in a dense urban setting. Emphasis is placed on site context, systems (ecological and technological), and materials research in support of the studio goals. The semester is devoted to developing a project that captures work-place environments, core / lobby organization, and the ability to fully examine the building design through large-scale models (1/2" = 1'-0" scale) that are both performative and descriptive of building structure and enclosure.

Additionally, the coordination of third year studios requires our attention to the process of representation: A proficiency in DRAWING that includes the following: study sketches, schematic plans/sections/elevations, design development drawings, and presentation drawings, is essential. Student’s drawings and models must show an understanding of design and building constructability, sketches and hard line drawings are required as appropriate to the process. Students should also express ability in model building. Final presentations will make use of appropriate presentation media including modeling, computer renderings and sketches. – Prof. Carroll

Course Goals and Objectives
The primary goal of this course is to demonstrate greater levels of skill and aptitude through the application of systems, materiality, and Architectural thinking / processes towards a design solution.

It is through this lens that we will seek to achieve the objectives listed below:

1) **Application of Systems within Planning and Ordering:** To actively engage integrated building and environmental systems to build upon fall semester work and develop systems thinking as an understanding of responsive design (Sustainable systems) and the effect of site and climate on design form, volumes, and material selections as well as the combination of various materials to create structure and enclosure.

2) **Fundamental Design Skills:** To actively engage the architectural design process as problem-solving and opportunity discovery in analytic & synthetic modes of inquiry linked through serial iterations and feedback loops. Sequential and iterative design opportunities should provide an understanding of “Architectural Thinking” [Awareness that design decisions are malleable based on feedback loops related to research and project development (site, culture, and program).]

5) **Building Envelope | Structure | Enclosure:** Explore materials and volumes and their relationship to human experience and interaction towards project process goals as well as human comfort and accessibility. Demonstrate a basic ability to use materials and structure to accomplish design intentions, wherein material performance and environmental impact will coordinate with an understanding of Environmental Technologies course objectives. The idea of aperture and skin/structure relationships, as well as integrating passive and active systems, should be at a level of basic understanding in these projects.

Note: It is expected that ALL completed work shall demonstrate a capacity for critical thinking, an awareness of architectural design processes, and technical proficiency to begin describing a comprehensive design solution.
Student Performance Criteria (SPC)  _ BOLD = PRIMARY

Realm A
A.1. Communication Skills  
A.2. Design Thinking Skills  
A.3. Visual Communication Skills  
A.4. Technical Documentation

Realm B
B.2. Accessibility  
B.3. Sustainability  
B.5. Life Safety  
B.6. Comprehensive Design  
B.8. Environmental Systems  
B.9. Structural Systems  
B.10. Building Envelope Systems  
B.11. Building Service Systems  
B.12. Building Materials and Assemblies

Realm C
C.1. Collaboration  
C.2. Human Behavior  
C.6. Leadership  
C.7. Legal Responsibilities

Topical NAAB SPC Outline applicable to Course

Realm A:
Critical Thinking and Representation will be 35% of the course;  
Drawing and other representational techniques comprise 10%  
Presentation skills and technical documentation comprise 08%  
Precedents and applied research comprise 12%

Realm B:
Integrated Building Practices, Technical Skills and Knowledge will be 55% of the course;  
Comprehensive Pre-Design processes comprise 03%  
Accessibility comprises 10%  
Life safety comprises 12%  
Envelope Design comprises 10%  
Sustainability, Details, and Systems comprise 20%

Realm C:
Leadership and Practice will be 10% of the course;  
Studio collaboration and contribution to studio culture comprises 02%  
Human Behavior comprises 02%  
Leadership comprises 04%  
Legal Responsibilities comprise 02%

Anticipated Learning Outcomes relative to Course Objectives
Course objectives, listed above, are intended to outline the level of exposure and emphasis placed upon specific tasks within the studio. Learning outcomes listed below capture some, but not all, of the anticipated results of the course objective list.

- The use of ordering systems and diagrams within the design process.  
- The use of environmental or material studies to inform the design process.  
- To include awareness through precedent with evidence within the project.  
- Building and system clarity (structural and environmental awareness)  
- The incorporation of Life Safety components, prioritizing vertical egress / usage separation.

Skillsets and abilities that will strengthen:  
- Clear design approach (analysis and processes)  
- Clearly understandable documentation techniques (technical and experiential)  
- Investigative research and application (Process clarity)  
- Site design integration and representation within projects
Textbooks and suggested learning resources:
There are no specific required texts for ARCH3012, although applicable resources will be shared at the SPSU Library. Additionally, online resources will be cited, web-linked, and/or provided on the Desire2Learn website for ARCH3012.

Suggested readings will be posted in PDF form, in most cases, and the list below will contain items related to the course.

Some suggested studio readings and texts are provided below.


The code of ethics is used to clarify the professional obligations of Architecture beyond building design and formal execution of project narratives and theoretical applications.


Essay by Rem Koolhaas on Atlanta, to clarify the role of the vegetated and buildings related to permanence and perception within Atlanta.


This and other scholarly articles are used to reinforce the role of diagram in the process of creation versus the role of diagram in post rationalization of design decisions.


Used to reinforce and clarify the level for standard for Architectural representation related to line weight, sketching, and presentations.


Selections by W.G. Clark on Place and Place-making as it relates to everyday necessity and pragmatic application of Architecture to fulfill need over want. This text is used to reinforce the role of Architecture as a Practical Art.

Kunstler, James. Geography of Nowhere


Used to reinforce and clarify the level for standard for Architectural representation related to line weight, sketching, and presentations, specifically as these tasks relate to materials and systems representation.

Materials and Tools
Students are required to personally furnish all drafting equipment and supplies, model making equipment and supplies. Vendors for Supplies and Tools (for informational purposes only) listed below:

Southern Polytechnic Campus Bookstore, Student Center
Sam Flax, 1745 Peachtree Street Northwest
Dick Blick, Roswell -1117 Alpharetta St./ Kennesaw - 2615 George Bisbee Parkway
Pearl Artist and Craft Supply, 3756 Roswell Road, NE

STUDIO/CLASSROOM POLICIES AND PROCEDURES
Every class session is a full working session with mandatory attendance.

During class, ideas and information related to the main objectives will be presented via lectures, sketches, photocopies, and assignments. Individual desk critique to develop assigned project will be the primary instruction method.

Students will be required to complete all assignments, and participate in class discussion/reviews. Criticism is a significant method for development of design ideas in this course.
ARCH 3012 has both conventional juries (students present their work graphically and verbally in an open forum for comments and critique) and in-progress pinups. There are no conventional examinations as with lecture courses.

Formal presentations will be conducted in a juried setting throughout the semester, within which students are to take notes related to all discussions and ideas shared within the review. A summary of the review will be delivered to the students after the review and web-links, notes, and commentary associated to referenced projects may be uploaded by your instructor or by your peers following the review on the Desire2Learn website.

Typically, up to four jurors will contribute professional and academic evaluations to assist project development. Jurors will provide ranking and evaluation based on established and published criteria that will inform evaluations of student work.

Desk critiques will occur throughout the semester with direct interface with the instructor. A portion of the semester will utilize a student sign-in system to allocate time to students who need specific review of their projects. Interim reviews and pin-ups will involve only the instructor or one visiting reviewer to discuss specific issues within the process of project completion. These reviews are typically ungraded but do contribute to participation evaluations for the course and provide an idea of quality within student development to measure progress.

Students are encouraged to work at their assigned studio desks within the studio at SPSU on all assignments. Students are expected to learn from their peers, from their work and methods, from their input and observations, as well as from their instructors.

Working in isolation is detrimental to both studio culture and the learning process and is highly discouraged.

Students are expected to arrive to each class period on time, prepared and having completed the required readings, homework and assignments. If work is not updated or if print outs are unavailable for desk critiques, then a student may forfeit their opportunity for an in studio critique until such data is provided.

If a student has three (3) unexcused absences (as defined by SPSU) during the semester a full final grade reduction will be issued. If a student has more than five (5) unexcused absences during the semester, a letter grade of F will be issued for the semester. Students who are absent (or not “pinning up”) for a required presentation, assignment or examination will receive, without exception, an F for that presentation, assignment, or examination.

Architectural Design processes require your full attention; there is no such thing as multi-tasking efficiently.

Cell phones and other communication devices that are not linked to class fulfillment are to be disabled during studio sessions. Stereos are allowed only with headphones. No loud music.

Watching videos and unrelated online multimedia entertainment is strictly prohibited during studio sessions as well as working on materials that are not associated with studio during studio sessions.

In the event these rules are not followed, hence interrupting the class session, the offender may be asked to leave the class for the remainder of the period and shall be marked as an unexcused absence for that day.
Academic Honesty
SPSU has an Honor Code and a procedure for handling cases when academic misconduct is alleged. Information about the Honor Code and the misconduct procedure may be found at [http://www.spsu.edu/honorcode/](http://www.spsu.edu/honorcode/). Note that plagiarism and other forms of academic dishonesty are grounds for failure in the course and dismissal from SPSU.

Students who feel they need accommodation based on the impact of a disability should make an appointment with the ATTIC 678-915-7361.

Disruptive behavior and academic dishonesty will not be tolerated.

Refer to policy in SPSU student handbook [http://www.spsu.edu/student/handbook.html#acedreg](http://www.spsu.edu/student/handbook.html#acedreg) and position paper Standards of Academic Conduct at [http://www.spsu.edu/cs/faculty/bbrown/papers/conduct.html](http://www.spsu.edu/cs/faculty/bbrown/papers/conduct.html).

In case of emergency, all students should input the following campus police emergency number in their cell phones 678-915-5555 and confirm they have updated information to HORNETALERT.

Evaluations
Letter grades and accompanying point values are determined according to the following criteria:

- **A (95+)** This represents exceptional work, exceeding the requirements and exhibiting advancement beyond level in design theory, technical understanding, and or work process.
- **A- (90+)**
- **B+ (88+)**
- **B (85)** This grade represents good work, exceeding the requirements and exhibiting creative solutions that respond to the important issues, communicated clearly.
- **B- (80+)**
- **C+ (78+)**
- **C (75)** This grade represents competent work, meeting all of the requirements and exhibiting a consistent effort in research, and design process, communicated clearly.
- **C- (70+)**
- **D+ (68+)**
- **D (65)** This grade represents marginal work, meeting some or all of the requirements but exhibiting inconsistency in design research and process; lacking in clarity or poorly communicated and generally understood as below level in sophistication and competency.
- **F (0)** This represents failing work, meeting less than minimum requirements, work done below level in sophistication and competency, failure to turn in work on time, or fulfill the obligations of the course.

Students will receive the evaluation and grade for each studio component within two weeks after the final review.

Student work will be graded according to the following criteria:

1) Intensity of effort
2) Clarity of thought and procedure
3) Quality of craft
4) Regular work habits
5) Participation in studio discussions

All projects will be evaluated through the jury system and individual desk crits.

The jury comments and grades are considered as recommendations towards student evaluation.

Students must take notes at all class meetings and juries. At juries, the class is to make notes of all discussions and copy/distribute these notes the evening of the jury as a record of the event.

Special conditions:
- **I (Incomplete)**
  An incomplete is only granted when no more than one assignment, homework, or presentation is needed to complete the course and the student has submitted evidence of a serious matter pertaining to the health of the student, or a member of the immediate family, or dependent children. Incompletes are granted by the faculty issuing the grade and must be negotiated with the faculty and department prior to the final conclusion of the semester.

Please read the SPSU student handbook for details on incomplete grades, and note that this is utilized for only serious, unavoidable delays, in the academic sequence to assist students in need.

Retention of Student Work
The Architecture Program reserves the right to retain any and all student work for the purpose of record, exhibition, and instruction. All students are encouraged to reproduce work submitted for their own records prior to submission of originals to the instructor.
Projects

A number of design projects may be issued for the semester, but generally the effort is towards a single design project which will allow the full investigation of the NAAB criteria outlined above. Our project this semester will be an office building 80,000 +/- SF with parking that will house the SE Research HQ of the International Living Future Institute. The project will house research labs for site, water, energy, and materials studies in Atlanta, GA as well as offices for employees living in and passing through Atlanta. http://living-future.org/node/125

STAGE 01: SITE: Solar access and parameters (see specific project handouts)
- Research + Documentation: 04 images per student + SITE RESEARCH (Jan 9)
- Application + Response: 08 / 04 image/outcome + SITE APPLICATION
- 05% of the final course grade: Due Friday, January 16th, 2015

STAGE 02a: SITE and SYSTEMS (see specific project handouts)
- Precedent + Program: 8 images / 02 outcomes + SITE ARTIFACT
- 05% of the final course grade: Due Friday, January 30th, 2015

STAGE 02b: PROGRAMMING and SYSTEMS (see specific project handouts)
- Program + Parti: 04 images per student + PROJECT MODEL
- 10% of the final course grade: Due Friday, February 20th, 2015

STAGE 03: FINAL PROJECT DEVELOPMENT (see specific project handouts)
- Schematic Design: Response February 27th, 2015
- Design Development: Presentation boards + Models
- 15% of the final course grade: Reviews February - April
- 15% of the final course grade: Test print and Section Model
- Final Presentation: Presentation boards + Models
- 40% of the final course grade: Wednesday, April 22nd, 2015

NOTE: The remaining portion of all student evaluation is determined through class participation and attendance.

Sites

Multiple site locations will be provided for student selection and investigation. The sites are located in Atlanta, GA and may be found via Google maps during the site research studio session during the first week of class (Wednesday).

MT-1 Peachtree St NE and 6th St NE
(To the east of Peachtree St NE, an empty parking lot currently)

MT-2 Spring and 5th St NE
(Located between 5th and 6th along Spring)

CON-1 West Peachtree / Connector / 75-85N Off ramp
(Site located near C Hospital parking deck)

DT-1 Ralph McGill and Peachtree St
(Located at NW corner of the intersection South of the medical arts building)

Solar access and parking metrics will be used to study sites for selection in the studio.

Students may suggest additional sites meeting standard developmental criteria.
ARCH 3012 Course Schedule Highlights

The Spring Semester 2015 Schedule will be updated throughout the semester to reflect the nature of progress and developments during the semester. Students may review the schedule for due dates, percentages for each review and other items of interest throughout the semester as an individual file within Desire2Learn. Additionally, updates may be posted to the Desire2Learn calendar allocated for this course to provide due dates and submission of work throughout the semester. Critical dates are listed below for reference only and serve as draft outline for the course.

<table>
<thead>
<tr>
<th>Week</th>
<th>Date</th>
<th>Event/Activity</th>
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<tbody>
<tr>
<td>1</td>
<td>January 5</td>
<td>Introduction / Studio setup</td>
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<tr>
<td>2</td>
<td>January 12</td>
<td>Desk Cits</td>
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<tr>
<td>3</td>
<td>February 2</td>
<td>Site models</td>
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<td>4</td>
<td>February 9</td>
<td>Site section created from drawings today</td>
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<tr>
<td>5</td>
<td>February 16</td>
<td>Desk Cits</td>
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<td>6</td>
<td>March 2</td>
<td>SPRING BREAK</td>
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<td>7</td>
<td>March 9</td>
<td>Individual work</td>
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<td>8</td>
<td>March 16</td>
<td>Desk Cits</td>
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<td>9</td>
<td>April 3</td>
<td>Individual work</td>
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<td>10</td>
<td>April 10</td>
<td>Individual work</td>
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<td>11</td>
<td>April 17</td>
<td>Individual work</td>
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<tr>
<td>12</td>
<td>April 24</td>
<td>Studio Meeting and Archiving Lecture</td>
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<td>13</td>
<td>May 1</td>
<td>Final date of class</td>
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<tr>
<td>14</td>
<td>May 8</td>
<td>Submission of work required</td>
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Critical dates:
- **March 2**: SPRING BREAK
- **April 3**: Deck Cits STAGE 1
- **April 10**: Individual work
- **April 24**: Studio Meeting and Archiving Lecture
- **May 1**: Last day of class
- **May 8**: Submission of work required
- **May 14**: Studio CLEANUP
Studio Program Focus Document:

THE INTERNATIONAL LIVING FUTURE INSTITUTE is a hub for visionary programs. The studio is assuming the need for a Southeaster United States Headquarters for this institute. At the HQ, research and clerical / office administrative tasks will occur.

The ILFI administers the Living Building Challenge™, the built environment’s most rigorous and ambitious performance standard. They are the parent organization for Cascadia Green Building Council, a chapter of both the United States and Canada Green Building Councils that serves Alaska, British Columbia, Washington and Oregon. They are also home to Ecotone Publishing, a unique publishing house dedicated to telling the story of the green building movement’s pioneering thinkers and practitioners.

The Institute offers green building and infrastructure solutions that move across scales (from single room renovations to neighborhoods or whole cities). They offer global strategies for lasting sustainability, partnering with local communities to create grounded and relevant solutions, and reaching out to individuals to unleash their imagination and innovation.

Through their work on the Living Building Challenge and other programs, they have helped to redefine the green building movement, substantially raising the bar for true sustainability. By embracing the psychology of the endgame, they strive to identify the most direct path to a future in which all life can thrive. They seek partnerships with leaders in the public, private and not-for-profit sectors in pursuit of a future that is socially just, culturally rich and ecologically restorative.

Spatial parameters:
80-100k SF Buildings / Research areas / Office Areas / Public education

Design parameters:
Students must display ecologically aware use of systems and responsive design to minimize resource usage within the building and site as well as response to the petals of the LBC. Diagramming and planning principles for workplace environments were stressed.

SUMMARY MATRIX
The 20 Imperatives of the Living Building Challenge:
Follow down the column associated with each Typology to see which Imperatives apply.

<table>
<thead>
<tr>
<th>NEIGHBORHOOD</th>
<th>BUILDING</th>
<th>LANDSCAPE + INFRASTRUCTURE</th>
<th>RENOVATION</th>
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<td>SITE</td>
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Acknowledgement of syllabus distribution to be printed and signed:

I, ____________________________ (print name), being a student registered within ARCH3012_001, have read and agree to abide by the guidelines set forth in this syllabus (current and future versions) issued by my instructor on the first day of this class.

STUDENT SIGNATURE: ____________________________

DATE RETURNED: ______________