#### PART II: RESPONSES TO THE MOST RECENT VISITING TEAM REPORT

# ANNUAL REPORT 2011 The University of Memphis Department of Architecture

Program Administrator:

Michael Hagge

Date of last accreditation/candidacy visit:

March 2010

Degree Program:

Master of Architecture (sixty credit hours plus approved pre-professional degree in architecture or approved related field)

# SUMMARY OF RESPONSES TO THE 2010 NAAB VTR (Continuing Candidacy) (Progress Made Since Submittal of 2010 Annual Report)

### Responses to 1.4 Conditions Not Yet Met

**7. Human Resource Development:** Schools must have a clear policy outlining both individual and collective opportunities for faculty and student growth inside and outside the program.

**2010 Visiting Team Assessment:** A description of the policies, procedures and criteria for faculty appointment, promotion and tenure is available at the university level, and a draft document is available for the Department of Architecture. Formalized faculty development opportunities are available in university material regarding sabbaticals, but access to specific resources for faculty development in the architecture program have not been formalized.

**2010 NAAB Response to Annual Report:** The program is advised to continue reporting on efforts to address this deficiency, especially on whether faculty members are able to take advantage of other professional development programs besides sabbaticals (e.g., funding for attending or participating in conferences).

The Department of Architecture has an approved formal Tenure + Promotion document. (http://www.memphis.edu/facres/pdfs/arch.pdf) The College of Communication and Fine Arts has a formalized policy for faculty development which is applicable to the faculty in the Department of Architecture. (http://www.memphis.edu/ccfa/facultypda.php) Full time and adjunct faculty members have received funding assistance to attend and/or participate in conferences. In some instances, student copresenters also attended. Among these conferences since the spring 2010 visit are the following: 2010 ACSA Administrators Conference in Washington, DC (Michael Hagge and Sherry Bryan); 2010 Creating Making Forum in Norman, OK (Sherry Bryan, Jennifer Barker, Jenna Thompson, student Megan Hoover); 2010 Design Communications Association in Bozeman, MT (Michael Chisamore and Jennifer Barker); 2010 NOMA Conference in Boston, MA (Jimmie Tucker and several students); 2010 Southern Association of College and University Business Officers Conference in Austin, TX (Chris Whitehead); 2011 American Institute of Architects Tennessee Chapter Annual Conference (Michael Hagge and Sherry Bryan); 2011 AIAS Grassroots Conference in Washington, DC (Sherry Bryan and students Megan Hoover and Fabiana Vazquez); 2011 Building Technology Educators Society Conference in Toronto, ON (Michael Chisamore and Jenna Thompson); 2011 National Conference on the Beginning Design Student

in Lincoln, NE (Jennifer Barker and Jenna Thompson); 2011 NOMA Conference in Atlanta, GA (Jimmie Tucker and several students); 2011 "Poet's Tax Funding for research in Philadelphia, PA (James Williamson). 2011 Travel to New Orleans and Baton Rouge, LA and Exhibition of Student Work (Tim Michael and several students).

**8. Physical Resources:** The accredited degree program must provide the physical resources appropriate for a professional degree program in architecture, including design studio space for the exclusive use of each student in a studio class; lecture and seminar space to accommodate both didactic and interactive learning; office space for the exclusive use of each full-time faculty member; and related instructional support space. The facilities must also be in compliance with the Americans with Disabilities Act (ADA) and applicable building codes.

**2010 Visiting Team Assessment:** Space needs for studio will be addressed when the art department moves out of the third floor in the summer of 2010. A shop manager has been hired which increased the safety of the shop, but the team is still concerned about ventilation and clearance around shop equipment.

**2010 NAAB Response to Annual Report:** The program should continue reporting on developments related to occupying additional space in Jones Hall. The changes made or planned by the program to address concerns about the shop equipment are clearly underway; please continue to report on progress.

The Department was allocated additional instructional and space in Jones Hall and will occupy this space as soon as the Department of Art vacates the space. This move was planned for the summer of 2010 but construction delays have altered this schedule with a new projected move date of winter 2011. The first floor gallery in Jones Hall has been assigned to the Department of Architecture. Additional space in the Jones Hall basement has been assigned to the Department. This space will be used for much-needed storage and model assembly. The employment of a full-time manager of the Art + Architecture shop has alleviated some concerns relative to safety and various improvements have been made. Model assembly will now be in the new basement space.

- **13. Student Performance Criteria:** The accredited degree program must ensure that each graduate possesses the knowledge and skills defined by the criteria set out below. The knowledge and skills are the minimum for meeting the demands of an internship leading to registration for practice.
  - **13.2 Critical Thinking Skills:** Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test them against relevant criteria and standards
  - **2010 Visiting Team Assessment:** There is evidence in studio and thesis projects and the accompanying materials that this is addressed, and in ARCH 7211. However the level of sophistication in the analysis of some of the reading materials suggests that more work needs to be done. The team found no evidence of instructor feedback on the written work, from short papers to thesis proposals.
  - **2010 NAAB Response to Annual Report:** The 2010 visiting team noted that there was evidence in student work that this SPC was being addressed; however, the team suggested that analysis of some reading materials could be more rigorous and feedback from instructors was lacking. Please continue to report on efforts to address this deficiency.

This was met in the 2008 visit but in 2010 was not presented in a manner for the team to locate and review it. The new, simplified matrix should ensure the team locates this in the future.

In ARCH 6221/4221, Determinants of Modern Design, critical thinking is addressed in several ways. Students are regularly challenged by the instructor to compare and contrast the work of different architects. Examples include discussions of how the attitudes toward nature held by Wright and Le Corbusier differ, or whether Mies "lies in order to tell the truth." Different points of view are encouraged and lively debates often ensue. (Due to their spontaneous character, it is difficult to document such in-class discussions.) Mid-term and final examinations include discussion questions requiring critical thinking. Papers are returned with comments from the instructor. In a final paper, students are required to write an exhaustive, illustrated critical analysis of a significant completed building or project that they feel contains serious design shortcomings or flaws. The selected project must have been designed by one of the architects covered in the reading assignments. A preliminary

synopsis of this paper, due in November, is returned with instructor comments, as is the final paper. With each reading assignment in ARCH 7211, Contemporary Architectural Theory, students are responsible for providing a written, personal analysis and critical questions that the work posed from the point of view of the student followed by in-class discussions and synthesis that will focus toward further research writing. Students receive feedback from the instructor in writing within the University of Memphis eCourseware system as well as within class context. Essays were reviewed and written responses included, with guidance toward further research and analysis, and ultimately additional research writing opportunities for the student. The ARCH 7012, Advanced Architectural Design Seminar II. devotes most classes to critical discussions of the relationship of technology and design from a historical, phenomenological, sociological and public policy perspective. The class includes students leading the discussions by creating and posing critical questions to provoke discussion. The mid-term and final exams are papers where the student is asked to critically answer questions in a composition format. Assignments in ARCH 7013, Advanced Architectural Design Seminar III, in the fall 2011 semester are closely integrated into the studio in order to make a more direct connection. For example, knowledge gained from precedent studies and topical studies undertaken within the seminar is directly applied to the studio project in the co-requisite ARCH 7713, Advanced Architectural Design Studio III. The students critically examine different buildings and elements such as structural systems, site issues, and sustainable characteristics to determine that which is successful and applies to the local characteristics the studio project.

**13.4 Research Skills:** Ability to gather, assess, record, and apply relevant information in architectural coursework

**2010 Visiting Team Assessment:** Visual, precedent and other types of design research appear to be adequate. A higher level of development is necessary in the thesis research. While bibliographies were often extensive in the final thesis proposals, there was little evidence that any of these texts were actually used in the preparation of thesis proposals and research projects and in the development of the students' concepts and strategies for completing the theses.

**2010 NAAB Response to Annual Report:** The program is advised to continue reporting on efforts to address this deficiency.

This was met in the 2008 visit but in 2010 was not presented in a manner for the team to locate and review it. The first offering of ARCH 7996, Architecture Thesis Studio, was ongoing during the team visit but Thesis books completed since the visit demonstrate the application of materials found in the research into the development of the concept and completion of the project. In addition, ARCH 7930, Architectural Thesis Research, a pre-requisite to ARCH 7996, has been restructured to require students to create formal presentations of their findings from research and precedent studies to their peers and faculty members for feedback and guidance for the next phase of research. Free writing of their understanding of the research is also required in addition to periodically updated outlines, rough drafts, and graphic analyses. This semester, workshops were conducted by University of Memphis Library staff in both this course and in ARCH 7211, Contemporary Architectural Theory, to assist in the process of finding relevant, useful material that will ideally be included within the body of their Thesis books.

**13.9 Non-Western Traditions:** Understanding of parallel and divergent canons and traditions of architecture and urban design in the non-Western world

**2010 Visiting Team Assessment:** Progress has been made in the addition of non-western material to the existing history course, but there are inadequate student performance materials to demonstrate an understanding of the parallel and divergent canons and traditions of design in the non-Western world. At the time of the visit, the course work covering non-western materials only required students to respond to two short exam questions on this material, which in any case was significantly less than the attention given to western traditions.

**2010 NAAB Response to Annual Report:** In the 2009 Conditions for Accreditation, this SPC is now covered in Realm A.9, Historical Traditions and Global Culture. The program is advised to continue reporting on efforts to address this deficiency and to include syllabi in the 2011 narrative that demonstrate increased attention to non-Western traditions.

The following courses addressed this SPC during the period following the 2010 Annual Report. ARCH 6221/4221, Determinants of Modern Design, included lectures and readings on contemporary

architecture in Japan, Turkey, Iraq, Sri Lanka, China, Israel, Saudi Arabia, Kuwait, India, and others, In the fall 2011 semester ARCH 7011, Advanced Architectural Design Seminar I, focused on the work and philosophy of Louis Kahn. The students prepared detailed presentations of his projects including his work in India, Bangladesh, Israel, and Angola. In ARCH 7211, Contemporary Architectural Theory, reading, writing, and analysis questions were used to address the following Non-Western areas of design: Japanese aesthetic metabolism, ma, symbiosis, post-modernism, pluralism, and ecology; African sacred geometry, cosmology, fractals, and urban design; Chinese cosmology and Feng Shui; Indian cosmology and Vastu Shastra; and urban design in the United Arab Emirates. Architects and theorists studied included Kenzo Tange, Kisho Kurokawa, Tadao Ando, Tovo Ito. Masao Miyoshi, Masaru Emoto, Masayuki Kurokawa, Alan Watts, Moshe Safdie, and R.A. Schwaller de Lubicz, among others. These explorations led to further student-driven research and critical writings. Students in ARCH 1120. Introduction to Architecture + Design, read Wabi-Sabi; for Artists. Designers, Poets & Philosophers by Leonard Koren. In ARCH 1211, History of Architecture I, and ARCH 1212, History of Architecture II, courses have been enhanced to include more non-western history and traditions from India, Japan, China, Africa, and others over a four week period. Students are then tested on this material including the mid-term and final exams.

**13.10 National and Regional Traditions:** Understanding of national traditions and the local regional heritage in architecture, landscape design and urban design, including the vernacular tradition

**2010 Visiting Team Assessment:** The emphasis on regional traditions is abundantly evident in Advanced Architectural Design studios 7712 and 7713, and 4716. There is no evidence of understanding of national traditions.

**2010 NAAB Response to Annual Report:** In the 2009 Conditions for Accreditation, this SPC is now covered in Realm A.9, Historical Traditions and Global Culture. The program is advised to continue reporting on efforts to address this deficiency and to include syllabi in the 2011 narrative that demonstrate increased attention to national traditions.

In ARCH 6221/4221, Determinants of Modern Design, lectures and readings focused on several national traditions, including those of Britain, Mexico, Finland, and pre-World War II Germany. In ARCH 7211, Contemporary Architectural Theory, research, readings, discussions, and written analyses covered the basic concepts of regionalism and traditions. Cultures included were the US, Europe, Japan, India, Africa, and the Middle East. With a particular focus on urban design and planning, challenges in regards to traditions and regionalism and potential loss of cultural identity within Japan, Egypt and the Middle East; and the influence and consequences of outside influences, particularly Western Theories being imposed on these cultures, was also covered. Required readings in ARCH 1120, Introduction to Architecture + Design included several books containing concepts of national traditions within the context of the evolution of design and experiencing architecture: Thinking Architecture by Peter Zumthor, The Eyes of the Skin: Architecture and the Senses by Juhani Pallasmaa, Ten Books on Architecture by Vitruvius, The New Architecture and the Bauhaus by Walter Gropius, and Towards a New Architecture by Le Corbusier, among others.

**13.12 Human Behavior:** Understanding of the theories and methods of inquiry that seek to clarify the relationship between human behavior and the physical environment

**2010 Visiting Team Assessment:** While some student work for thesis research indicated some awareness of this topic, it was not consistent across the student body. Such materials rarely appeared in bibliographies for thesis proposals, nor were they incorporated into thesis development. No coursework syllabi or other materials indicated that this criterion is addressed.

**2010 NAAB Response to Annual Report:** The program is advised to continue reporting on efforts to address this deficiency and to include in the 2011 narrative copies of assignments in ARCH 7012 and 7013 related to this SPC and a brief description of student work submitted for those assignments.

This content has been added to ARCH 7012, Advanced Architectural Design Seminar II, as well as in other courses across the curriculum. Students in ARCH 7012, Advanced Architectural Design Seminar II, read and discussed the work and writings of Steven Holl, Christopher Alexander (Pattern Language), Bill Hillier (Space Syntax), Ron Walkey and Peter Bosselmann (Reality and Realism in Urban Design). Each explored the relationship of human behavior and its impact on architecture (Holl) or ways to research and use behavioral data (Alexander, Hillier, Walkey and Bosselmann). Students participated in student-led discussions about the works of each writer or architect and the

mid-term and final exams required the students to critically bring together their thoughts on the issue of human behavior and design. In ARCH 7013, Advanced Architectural Design Seminar III, and ARCH 7713, Advanced Architectural Design Studio III, students studied the demographics of the immediate site examining such factors as population size, median age, educational levels, and socioeconomic levels of the localized population. In ARCH 7211, Contemporary Architectural Theory, readings, research, writings, and discussions covered the basic concepts and application of environmental psychology including the work of Martin Heidegger, Maurice Merleau-Ponty, Peter Zumthor, Juhani Pallasmaa, and Japanese theories in the realm of phenomenology. The psychological ramifications of Modernism, including the theories of Jean Baudrillard, the fall of Pruitt-Igoe, Marxism, the implied universalisation and control aspects within Modernism, and the Ethics of Aesthetics (Wittgenstein, Dewey) were also covered.

**13.13 Human Diversity:** Understanding of the diverse needs, values, behavioral norms, physical ability, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity for the societal roles and responsibilities of architects

**2010 Visiting Team Assessment:** While the student body appears to be respectful and aware of such issues in their contacts with fellow students and faculty, the evidence for this in design work is absent.

**2010 NAAB Response to Annual Report:** The program is advised to continue reporting on efforts to address this deficiency and to include in the 2011 narrative copies of assignments in ARCH 7012 and 7013 related to this SPC and a brief description of student work submitted for those assignments.

Readings and lectures that engaged the issues of diversity were a part of ARCH 7012, Advanced Architectural Design Seminar II this past spring. Students read The Timeless Way of Building by Christopher Alexander and his thoughts about how that is derived from the culture itself. Students also read writings by Leon Krier about developing typologies that are derived from multiple cultural settings. Additional readings included John Lobell and Michael Dobbins on how different cultures create different city forms and William Mitchel, Manuel Castells, and Ken Yeang on western positivist architectural thought. Students participated in student-led discussions about the works of each writer or architect and the mid-term and final exams required the students to critically bring together their thoughts on the issue of human behavior and design.

**13.14 Accessibility:** Ability to design both site and building to accommodate individuals with varying physical abilities

**2010 Visiting Team Assessment:** While elements of understanding of this criterion were illustrated in most studio projects, the team noted that ADA compliance was not uniformly demonstrated to the ability level on all projects in the comprehensive advanced studio projects.

**2010 NAAB Response to Annual Report:** The program is advised to continue reporting on efforts to address this deficiency and to include in the 2011 narrative documentation of student work that responds to this SPC.

ARCH 7711, Advanced Architectural Design Studio I, emphasizes the incorporation of ADA compliance into all projects, along with life-safety, building envelope and service systems, materials and assemblies. In ARCH 7712, Advanced Architectural Design Studio II, each student is expected to address accessibility within the context of the solution to the problem posed by the faculty. Issues of the accessibility of entrances, bathroom facilities, elevators and emergency exits are worked out during the course of the project. Students in ARCH 7713, Advanced Architectural Design Studio III, spend two class periods performing a preliminary review of their building ensuring complete accessibility. Special attention is given to the proper design and number of egress points as well as clearance issues for wheelchair-bound inhabitants. Turning radii, clear floor areas, and proper push/pull door clearance are all given special attention. Accessibility in elevators in covered in ARCH 7421, Advanced Environmental Systems, in lecture, readings, in a test question, and field trip to the University Center glass elevator.

**13.16 Program Preparation:** Ability to prepare a comprehensive program for an architectural project, including assessment of client and user needs, a critical review of appropriate precedents, an inventory of space and equipment requirements, an analysis of site conditions, a review of the

relevant laws and standards and assessment of their implication for the project, and a definition of site selection and design assessment criteria

**2010 Visiting Team Assessment:** While some individual elements of the criterion were utilized in studio projects, evidence was not demonstrated in student work of the ability to prepare a comprehensive architectural program.

**2010 NAAB Response to Annual Report:** The program is advised to continue reporting on efforts to address this deficiency and to include in the 2011 narrative copies of assignments in ARCH 7712 related to this SPC.

Faculty teaching the graduate-level design studios have been asked to ensure students demonstrate an ability to prepare a comprehensive program. Detailed program preparation was incorporated into ARCH 7712, Advanced Architectural Design Studio II, in the spring 2011 semester as a model for demonstrating compliance. Students in this studio (and the ARCH 3713, Architectural Design III Studio the previous semester) addressed program preparation in the Memphis Art Park (MAP) Frederick H. Cossitt Library project which consisted of an adaptive reuse of several existing buildings in downtown Memphis. Students were required to take the rough program provided by the client and develop it over several meetings into a final program that evolved with the design of the project. Each student turned in a written program with their project. Working with representatives of the Memphis Fire Department, students in ARCH 4716, Architectural Design VI Studio, created their own building program for a prototype Firehouse to be located within the University of Memphis area. The program was evidenced in the presentation material from each student.

**13.22 Building Service Systems:** Understanding of the basic principles and appropriate application and performance of plumbing, electrical, vertical transportation, communication, security, and fire protection systems

**2010 Visiting Team Assessment:** This criterion remains not yet met. While the understanding of vertical systems and fire protection systems has been demonstrated in ARCH 7421, the team could not find evidence of communication and security systems.

**2010 NAAB Response to Annual Report:** The program is advised to continue reporting on efforts to address this deficiency and to include in the 2011 narrative a brief description of student work submitted for assignments related to this SPC.

Communication and security systems have been added to the content of ARCH 7421, Advanced Environmental Systems. Faculty members teaching all upper level and graduate design studios have been asked to give additional attention to building service systems and to ensure students document these in their work. In 2010, ARCH 7011, Advanced Architectural Design Seminar I, focused on an analysis of life-safety, building envelope and service systems, materials and assemblies, as integrated into the design of major works by winners of the Pritzker Architecture Prize. In 2011, the seminar included student presentations on the work and philosophy of Louis Kahn including a graphic analysis of his major projects. The distinction between served and servant spaces in all his projects is ideal for illustrating service systems, and his emphasis on the expression of the nature of materials makes for clear examples of the design of building envelope, materials, and assemblies. In the program preparation element of ARCH 7712, Advanced Architectural Design Studio II, and ARCH 3713, Architectural Design Studio III, students were required to include an elevator with its associated mechanical space, integrate sustainable lighting and ventilating, and a traditional mechanical system space. Each student provided a mechanical diagram and evidence of mechanical integration in the section and plans of their project. Students in ARCH 7713, Advanced Architectural Design Studio III, address vertical transportation, communication/security, and fire protection by examining the inclusion of such systems into the building and accommodating space within the building to house the master controls of such systems. Careful attention is given to serviceability of these systems in regard to main control rooms, but also to clearance issues in regards to plumbing pipes, electrical conduit, sprinkler pipes, and low voltage cabling within the plenum space above ceilings where conflicts with mechanical ducts and lighting often occur. Building service systems are an integral part of ARCH 7421. Advanced Environmental Systems. Study modules on elevators and fire protection, among others, are used and students are tested on this material in examinations. Security and surveillance systems are covered in lectures, readings, and on examinations.

**13.25 Construction Cost Control:** Understanding of the fundamentals of building cost, life-cycle cost, and construction estimating

**2010 Visiting Team Assessment:** This criterion remains not-yet-met. This is scheduled to be taught for the first time in ARCH 7431, Advanced Professional Practice, which is ongoing and not complete at the time of the visit. The Team is concerned that the course is already packed, and we are not certain that they can give the appropriate attention to this important criterion within only this course.

**2010 NAAB Response to Annual Report:** In the 2009 Conditions, this SPC is now covered in Realm B.7, Financial Considerations. Please continue to report on the results of efforts to address this deficiency.

In the spring 2011 semester, ARCH 6516/4516, Special Topics in Architectural Practice, (ARCH 7431), incorporated lectures and readings on building construction cost, life cycle cost, and construction estimating. A final paper consisted of preparation of a construction cost estimate for a completed studio project using the Elemental (Assemblies and Subsystems) Method based on cost data as found in R.S. Means Square Foot Costs. ARCH 7712, Advanced Architectural Design Studio II, addressed program preparation in the MAP Art Booth project in 2011 and the Ventures Lab (Masonic Lodge) project in 2010. Students were required to produce a schematic cost estimate of a part of their project using Means Cost Works software. Students in ARCH 7713, Advanced Architectural Design Studio III, will develop a brief cost estimate of the building based upon the original 16 divisions of CSI in the fall 2011 semester

#### Responses to 1.5 Causes of Concern

The causes for concern in many cases involve documentation, articulation or clarification of policies and procedures that at present appear to be present, but only on an informal basis.

**Review of Incoming student undergraduate Transcripts:** Many of the courses that meet the student performance criteria were found in the undergraduate course work. It is therefore critical to review the transcripts and supporting documentation of incoming graduate students to ascertain that these requirements have been adequately met in their previous instruction.

**2010 NAAB Response to Annual Report:** The program is advised to continue reporting on the results of efforts to address this concern.

The Department of Architecture has implemented a process by which the transcript of all incoming students from programs other than the University of Memphis BFA in Architecture degree are evaluated to ensure courses that are being used to meet the student performance criteria are equivalent. Since the 2010 NAAB team visit, all students entering the M.Arch degree program have either come from the preprofessional architecture program at University of Memphis or a school with a NAAB-accredited M.Arch degree. Students seeking admission to the M.Arch from schools not associated with a NAAB-accredited M.Arch degree must demonstrate competency (structures, building systems, and so forth). Students in this category must remedy all deficiencies by taking courses in the BFA in Architecture degree before being admitted into the M.Arch. Revisions to the course matrix with more emphasis on SPC criteria being met at the graduate level will also help alleviate this issue.

**Duplication of courses at undergraduate and graduate levels:** The team identified a duplication of courses at the undergraduate and graduate levels that increases teaching loads and consumes faculty resources and student hours. The combinations of technical and professional courses at the undergraduate level, where licensing is not an issue, would profit from being reconfigured, now that the M. Arch program is in place.

**2010 NAAB Response to Annual Report:** The program is advised to continue reporting on the results of efforts to address this concern.

Historically, not all of the students enter graduate school in the academic year following their graduation from the BFA in Architecture degree program. Many choose to work for a year (often longer) before returning to school to pursue the M.Arch degree. That has been the rationale for providing environmental systems and professional practice courses at the undergraduate level. Relative to the team concerns, the courses in question were evaluated and changes made.

The Department developed a new course, Special Topics in Architectural Practice, which was offered in the Spring 2011 semester as a combined graduate/undergraduate level professional practice course in lieu of the two courses (graduate and undergraduate) originally scheduled. Instructor and student feedback resulted in new course content being developed. The undergraduate course will now focus on "Professional services; ethics; building programming, building codes, construction documents, cost estimating" while the graduate course will focus on "Principles and legal aspects of architectural practice; professional ethics, organization, financial management, business planning, time and project management, risk mitigation, mediation and arbitration; trends affecting practice such as globalization, outsourcing, project delivery, expanded practice settings, diversity, and others."

The undergraduate course ARCH 3421, Environmental Systems, is integrated into ARCH 3713, Architectural Design III Studio, and focuses on heating, cooling, and lighting as form-givers, sustainability, and basic principles of basic design, natural and passive systems, and mechanical and active systems. ARCH 7421, Advanced Environmental Systems, focuses on the technical systems and calculations including lighting, acoustical, HVAC, and building service systems.

**Course matrix simplification:** For future accreditation reviews, the M. Arch course matrix for student performance criteria should only identify the one or two areas where the criterion in question is best met. **2010 NAAB Response to Annual Report:** The program is advised to continue reporting on the results of efforts to address this concern.

The Department Chair and Architecture Program Director initiated a review of the matrix and a committee to reconfigure the matrix is in place. Each faculty member reconfigured the matrix based on his/her interpretation of how their particular courses met different criteria. It was also the intention of the committee to meet as many of the student performance criteria as possible at the graduate level. This has been accomplished although structures and some other criteria remain at the undergraduate level.

Continuing funding for development programs: The program needs a clear plan for funding for faculty development, research, and lecture series and for the enhancement of the annual budget on something other than a one-time basis. There is discussion about doing so, but no plan is yet in place. The program needs to formalize policies for access to development and research funds for faculty. The team is concerned that while the university has a sabbatical program, faculty do not take advantage of it.

2010 NAAB Response to Annual Report: The program is advised to continue reporting on the results of efforts to address this concern.

The Department is continuing to partner with AIA Memphis, ULI Memphis, and others to maximize resources. The Tennessee AIA chapter and the Tennessee Board of Architectural and Engineering Examiners worked together with the Department to secure approval for additional funding as a part of the annual A+E Board Grant currently available only to accredited programs. The initial grant under this program in 2011 was approximately \$20,000. The amount of funding for adjunct faculty has not been cut, unlike what has happened in many other academic units. Funding for adjunct faculty through alternative sources including the Office of the Provost and Office of the Vice Provost for Extended Programs has continued. A multi-dimensional lecture series is in place including architects and designers, film series, IDP workshops, and so forth.

Faculty development issues are addressed to some degree in the response to 7. Human Resource Development. The reason none of the eligible faculty have taken advantage of the professional development assignments through the formal process in place within the College of Communication and Fine Arts is because of their commitment to continue to work towards achieving accreditation for the M.Arch. The Department Chair has been assured faculty will take advantage of this after accreditation! The Department has assisted virtually every faculty member, full-time and adjunct, requesting funds for travel. Additional information on this is contained herein in 7. Human Resource Development.

**Hazmat study and code study:** The team is concerned that a hazmat, ADA and mechanical and environmental control study be conducted of the current facility, and that a plan be put into place to address the needed corrections and to specify when such a plan will be implemented.

**2010 NAAB Response to Annual Report:** The program is advised to continue reporting on the results of efforts to address this concern.

The University has a plan for campus-wide abatement, HVAC, and ADA-compliance programs. Conversations are ongoing with representatives from Campus Planning and Design, the Physical Plant Department, and the office of Student Disability Services. Floor tiles have been replaced and other improvements to the Jones Hall space occupied by the Department of Architecture have been made since the NAAB 2010 visit.

**Program visibility on campus:** The transformation of the first floor gallery into a loading dock would be a huge lost opportunity for the program, which already suffers from an absence of review areas for formal and informal displays. Much of architectural education hinges upon public review and analysis, which is currently limited to narrow hallways. This is stunningly inadequate. The community and city building and neighborhood outreach projects currently cannot be placed on public view in any venue, but were the program to have access to a space such as that of the gallery, despite its relatively small size, there would be a place to welcome residents in the community and enable them to participate in the university environment. If the lobby were also developed as a useable resource, it would welcome students and faculty from throughout the university and enable them to share the program's lively vitality.

**2010 NAAB Response to Annual Report:** The program is advised to continue reporting on the results of efforts to address this concern.

The Jones Hall Gallery has been assigned to the Department of Architecture with occupancy effective January 2012. The delay in occupying the gallery is a result of construction delays which changed the date the gallery would become available. In addition, space in the basement of Jones Hall has also been assigned to the Department. The Downtown Design Studio opened in August 2010 has continued to be used for studios as well as community-related meetings and presentations. The initiation of construction on the Prototype Recycling Center designed by faculty and students in the Department and located adjacent to Jones Hall has also increased the visibility of the Department on campus.

**Storage space:** There is no storage space for student work, which is a serious shortcoming for an architecture program.

**2010 NAAB Response to Annual Report:** The program is advised to continue reporting on the results of efforts to address this concern.

When the Department of Architecture acquires the remainder of the third floor in Jones Hall upon the move of the Department of Art to another building, some storage space will become available. Additional storage space in the basement will also become available in December 2011. The Department has already reconfigured space on the third floor with flat files for storage of student work as well as shelving for storage of models. The off-campus spaces mentioned in the previous report have not been utilized and most likely will not be due to distance and non-conditioned space issues.

**Lack of shop equipment:** The current shop lacks the appropriate equipment for the production of architectural models and has limited access hours, layout and storage space. Laser cutters, for example, are standard features of architecture programs throughout the US but this program does not have one. Plans should be made for the acquisition of such specialty equipment.

**2010 NAAB Response to Annual Report:** The program is advised to continue reporting on the results of efforts to address this concern.

Continued improvements to the Art + Architecture Shop remain a priority for the Department of Architecture. Access has improved through the assignment of M.Arch graduate assistants to the shop for use on weekends and other non-class times by architecture students. The Department acquired a large format scanner, plotter, color laser printer and other equipment and is seeking funding to acquire additional equipment under university as well as State A+E Board funding. Discussions with the College Development Officer and others to secure additional funds are ongoing. Storage issues will be remedied in December 2011 with the acquisition of space in the basement of Jones Hall.

# PART II: CLARIFICATION OF RESPONSES IN PART I

ANNUAL REPORT 2011
The University of Memphis
Department of Architecture

#### **CLARIFICATION OF RESPONSES IN PART I**

This part is linked to other questions in Part I for which a narrative may be required.

SECTION G. HUMAN RESOURCE SUMMARY (Architecture Program)

# 3. Faculty Credentials

The table below shows the credentials of faculty members at the rank of full-time Instructor and Adjunct Professor. This is intended to supplement the table in the main report.

Degree		uctor Female	Adju Male	nct Female	Tota Male	l Female	Grand Total
D. Arch. (accredited)	0	0	0	0	0	0	0
M. Arch. (accredited)	1	0	2	2	2	2	4*
B. Arch. (accredited)	0	0	3	3	3	3	6*
Ph.D. in architecture	0	0	0	0	0	0	0
Ph.D. in other discipline	0	0	0	0	0	0	0
Post-professional graduate degree in architecture	0	0	1	2	1	2	3
Other degrees in architecture	0	0	1	0	1	0	1*
Other graduate degrees in related	0	0	2	1	2	1	3
Fields (planning, urban design, etc.)							
Registered in U.S. Jurisdiction 1		0	5	2	6	2	8

\*NOTE: Of the eleven adjunct faculty members, all but one holds a professional degree in architecture, either the M.Arch or the B.Arch. The other holds a BSAT degree from the 1970s and is registered in multiple jurisdictions in the U.S.

# PART II: RESPONSES TO THE MOST RECENT VISITING TEAM REPORT

# ANNUAL REPORT 2011 The University of Memphis Department of Architecture

# **Requested Additional Information**

The following information on M.Arch courses is provided per the NAAB request.

Course	Information Provided	SPC
Advanced Architectu ARCH 7713	ral Design Studio III Syllabus, Schedule, Assignments, Project Description	13.12, 13.14, 13.22
Advanced Architectu ARCH 7013	ral Seminar III Syllabus, Schedule, Assignments	13.12, 13.13
Advanced Architectu ARCH 7712	ral Design Studio II Syllabus, Schedule, Assignments	13.12, 13.14, 13.16, 13.22
Advanced Architectu ARCH 7012	ral Seminar II Syllabus, Schedule, Exams	13.12, 13.13
Advanced Architectu ARCH 7711	ral Design Studio I Syllabus, Schedule	13.14
Advanced Architectu ARCH 7011	ral Seminar I Syllabus, Schedule	13.9, 13.22
Advanced Profession ARCH 7431 (6516)		13.25
Advanced Environme ARCH 7421	ental Systems Syllabus, Schedule, Final Exam Excerpts from Lectures	13.14, 13.22
Contemporary Archit ARCH 7211	ectural Theory Syllabus, Schedule, Assignments	13.9, 13.10, 13.12
Determinants of Mod ARCH 6221/4221	dern Design Syllabus, Schedule, Mid-Term Exam Paper Assignment	13.9, 13.10
Architectural Thesis ARCH 7930	Research Syllabus, Schedule	13.4

#### **SYLLABUS**

#### ARCH 7713 - ADVANCED ARCHITECTURE DESIGN STUDIO III

Department of Architecture • CCFA • The University of Memphis

Fall 2011 (Syllabus - issue date 30 August 2011) (TENTATIVE - Subject to Revision)

Section 001: Studio 7:30pm - 10:30pm Tuesday, Wednesday, & Thursday Room Jones 401

Instructor: tim michael
Office: Jones 308

Office Hours: Tuesday, Wednesday & Thursday, 10:30pm – 11:00pm, and by appointment

Telephone: 901.507.4413 (office) or 901.527.3560 (office)

E-mail: tmichael@archimania.com

**CATALOG:** Advanced studio problems in architecture; changing topics address a variety of critical and

ideological constructs; emphasizes comprehensive design.

**PREREQUISITES:** COREQUISITE: ARCH 7013

**OVERVIEW:** 

This studio is intended to intensely explore the design process, critical thinking, and the making of buildings. It is focused primarily on commercial building design involving thought within abstract realms as well as pragmatic foundations. It is weaved from such strands as history, landscape, culture, ecology, and economy. Site analysis, diagramming, programmatic research, structural logic, systems integration, and materiality investigations are intended to expose the student to a varied depth of investigation. The student is expected to demonstrate creative thought while working within the pragmatic confines of building construction and search for a means by which construction may nurture the initial design concept. The student is expected to demonstrate an understanding and appreciation for how buildings are constructed through the craft of making.

#### POLICIES:

- 1. The guidelines for studio conduct outlined in the Department of Architecture Studio Rules shall be observed at all times.
- 2. Attendance at all course sessions and full participation in sessions are required in accordance with the Department of Architecture Attendance and Participation Policy.
- 3. Cellular telephones and paging devices must be turned off during class. Exceptions may be granted in advance for special circumstances.
- 4. Students are expected to complete all assignments in a timely and professional manner.
- 5. Each assignment must be submitted in its original form and will be retained by the Department of Architecture. All projects are to be photographed by the student for possible inclusion in portfolios. A CD of images of each project must be submitted at the end of the term for retention by the Department.
- 6. Posting information on-line shall be considered the same as a handout.
- 7. Transmittal of information via e-mails shall be considered the same as a handout or announcement in class. The University of Memphis e-mail address will be used.
- 8. Reasonable and appropriate accommodations will be provided to students with disabilities who present a memo from Student Disability Services (SDS). Students who request disability accommodations without a memo will be referred to SDS. http://www.memphis.edu/sds/faculty/ada504.php.

9. Academic Dishonesty. Because architecture and interior design are professions regulated by state legislation and with a code of ethics governing professional conduct, similar rules and protocols are in effect in the design studios and classes as well as other education-related environments. The Honor Code of the University of Memphis Department of Architecture states: "I will not lie, cheat, or steal nor tolerate those who do." Students must also abide fully by the policies, rules, and regulations set forth in the Department of Architecture Student Policies Manual and the applicable documents of the University of Memphis. Among these are the Code of Student Rights and Responsibilities and the University of Memphis Code of Student Conduct - Academic Dishonesty. More information on these codes may be found at the following websites: <a href="http://saweb.memphis.edu/judicialaffairs/csc/CSRR.pdf">http://saweb.memphis.edu/judicialaffairs/csc/CSRR.pdf</a> and <a href="http://saweb.memphis.edu/judicialaffairs/dishonesty/definitions.htm">http://saweb.memphis.edu/judicialaffairs/dishonesty/definitions.htm</a>.

#### **OBJECTIVES**

- Develop the most comprehensive project to date that demonstrates an abundance of thought from start to finish, from the concept to the execution. This building should be well conceived and well developed. It should exhibit a degree of professionalism indicative of the varied and amount of thought placed into the project.
- 2. Dig deep into buildings and understand them not only from a conceptual perspective, but also their bones and technical nature.
- 3. Demonstrate an understanding of structure and how it may be integrated within the design while maintaining conceptual intent.
- 4. Demonstrate an understanding of building systems and how they may be integrated within the design while maintaining conceptual intent.
- 5. Demonstrate an understanding of programming and how to develop a workable program.
- 6. Demonstrate an understanding of basic diagramming and its importance in reinforcing the concept of your building.

#### NAAB CRITERIA:

This studio is known as the comprehensive studio within the graduate program, and as such, you will be required to demonstrate an ability and/or understanding of many of the student performance criteria (SPC), far more than any other single course. In order to do so, this course will require a great amount of discipline, drive, and ability to execute well within a short period of time. Required SPC for this course:

- A.2 <u>Design Thinking Skills</u>: *Ability* to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.
- A.3 <u>Visual Communication Skills</u>: *Ability* to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.
- A.4 <u>Technical Documentation</u>: *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.5 <u>Investigative Skills</u>: *Ability* to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

- A.8 <u>Ordering System Skills</u>: *Understanding* of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.
- A.9 <u>Historical Traditions / Global Culture</u>: <u>Understanding</u> of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of climatic, ecological, technological, socioeconomic, public health, and cultural factors.
- B.2 <u>Accessibility</u>: *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 <u>Sustainability</u>: *Ability* to design projects that optimize, converse, or reuse natural or 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 <u>Site Design</u>: *Ability* to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.
- B.5 <u>Life Safety</u>: *Ability* to apply the basic principles of life safety systems with an emphasis on egress. (Life Safety Plan)
- B.6 <u>Comprehensive Design</u>: *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 & 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.8 <u>Environmental Systems</u>: *Understanding* the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.
- B.9 <u>Structural Systems</u>: *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.

# INSTRUCTIONAL METHODOLGY:

This course is a design studio and will be conducted in such a manner. It is expected that all students be present at each studio session. Desk critiques will be given at each session, although each student may not receive a desk critique at every studio session. Desk critiques will not be given if prior scheduling dictates otherwise. All projects are required in the format outlined by the project description. Late projects will not be accepted, unless prior arrangements are made with the instructor. In the case of unforeseen circumstances, a written excuse from an official involved in the circumstance

must be submitted for approval by the instructor. While it is expected that the student strive to the highest level of craft and workmanship, projects will be graded on a cumulative basis where the student continually demonstrates a commitment to understanding and exploration of new design principles and investigations

*Design Project:* A major design project will give form to the primal theme of the course: city building(s). Presentation formats will consist of sketches, drawings, collage, models and oral/written narratives. More information will be provided in a separate handout.

Research Projects: The studio is closely coupled with the seminar, and as such, the two will often overlap. Research projects aimed at driving the studio design project, yet also centered around the NAAB requirements for this course, will be assigned within studio fulfilled as part of the seminar accompanying the class.

Sketchbooks/Participation: Questions, discoveries, and further selected research in a written and graphic format are included in the sketchbook. Critical points from the readings, discussions, presentations, as well as personal insights into the subjects, are also recorded in the sketchbook. An assemblage of sketches on "trash" paper shall be included/considered as a sketchbook.

#### **REQUIREMENTS:**

The assignments denoted below constitute the majority of the studio requirements. Additional information and assignments will be given in separate handouts.

Design Project - 60% Research Projects - 30% Sketchbooks / Participation - 10%

# EVALUATION and GRADING:

As per the University and Department standards, students must receive a minimum grade of "C" in courses taken within their major; grades lower than "C" (i.e. "C-" and below) will require that the class be repeated. All assignments must be completed on time – late work will NOT be accepted.

1. Breakdown:

Design Project: 60%
Research Projects: 30%
Sketchbooks: 5%
Attendance and Participation: 5%
100%

2. Grading Scale: The University stipulated plus/minus grading scale is utilized in this studio. A grade of C represents the fulfillment of all project requirements at a minimum level. A grade of B or A represents the fulfillment of all project requirements with an above-average and superbly detailed level of inquiry and investigation, respectively. The overall general grading scale is as follows:

90 - 100% A 80 - 89% B 70 - 79% C 60 - 69% D 59 - below F RELEASE FORMS: The Department of Architecture Release / Hold-Harmless Agreement must be completed

and signed by each student before taking any off-campus trips, including trips within Memphis. The Medication Release Form must be completed for any out-of-town trips. Students must print and complete the forms during the first week of classes and submit them to the instructor. These forms may be found at

http://architecture.memphis.edu/TravelRelease.pdf

TEXTBOOKS: The Architect's Studio Companion – 3rd of 4th Edition, Edward Allen & Joseph Iano

(required)

Thinking Architecture, Peter Zumthor (recommended)

OTHER ITEMS: The following are incorporated by reference: Department of Architecture Rules of Conduct,

Department of Architecture Attendance & Participation Policy, Department of Architecture

Policies Manual (http://architecture.memphis.edu/ormanfa09.pdf)

# SCHEDULE ARCH 7713 - ADVANCED ARCHITECTURAL DESIGN STUDIO III Fall 2011 (issued 30 August 2011)

Aug.	30 31	T W	Introductions / Syllabus / Schedule
Sept.	1	Th	B.4 Site Design (Analysis)
	3 6 7 8 13 14 15 20 21 22 27 28 29	Sat. T W Th T W Th T W Th T W	SITE VISIT Program / Site Design / Concept  " " " Diagramming / Floor Plans " " 3-D Representation (Elevations / Massing Models) " " FIRST QUARTER REVIEW Ordering Systems / Response from Review " " "
Oct.	04 05 06	T W Th	Sustainability
	11 12 13 18 19 20	T W Th T W	MID-TERM REVIEW No Class – Fall Break Structural Design
	25 26 27	T W Th	Structural Design
Nov.	1 2 3 8 9 10	T W Th T W	Environmental Systems " " " " THIRD QUARTER REVIEW
Dec.	15 16 17 22 23 24 29 30 1	T W Th T W Th T W	Accessibility / Life Safety  " " " "  No Class – Thanksgiving Holiday Final Production " "
	6 7 8 14	T W Th W	Last Day of Class No Class – Study Day FINAL REVIEW OF PROJECT

# ARCH 7713 - Adv. Architectural Design Studio III

Department of Architecture • CCFA • The University of Memphis



#### Studio Project: Eggleston Museum

William Eggleston is among a select few to make a lasting impact in the world of modern art. His explorations in color photography have earned him praise across the US and around the world. His ability to make the exceptional from the ordinary sets his work apart and draws the viewer into a world that is strangely familiar yet never before seen. The work is not lost among the most educated in the art world, particularly the world of contemporary photography; however, Eggleston and his work remain virtually unknown within the environs that served as his subject on so many occasions. To bring Eggleston to the forefront of a broader audience, exhibit the work in a permanent home, and honor the man who has offered so much to the field of photography, the Eggleston Trust seeks to build a museum within the current hometown of William Eggleston, Memphis, TN.

The museum is to be located on a site which holds similar qualities as the subject in an Eggleston photograph: ordinary yet foreign; gritty and real; raw and unapologetic. The site is vacant and forgotten; a relic from a freeway project gone bad. It is not polished nor pastoral. It is not noticed, yet there is something remarkably wonderful about it. It sits at the front door to the city, elevated like the Acropolis via a massive earthen mound once intended to move cars up an overpass. It is passed by thousands of people every day as they zip around the interstate, yet it draws no attention to itself. It sits quietly waiting for an Eggleston to come along and share its ordinary beauty with the world beyond.

#### Program

Exhibition space	12,000 sq. ft
Permanent Gallery (7,500 sf)	·
Rotating Exhibit (7,500 sf)	
Archive /Storage Space	3,000 sq. ft.
Office Space	2,000 sq. ft.
Museum Staff Offices (5-6 FTE)	•
Security Staff Offices (1-2 FTE)	
Gallery Attendants	
Lecture Hall	1,500 sq. ft.
Community Outreach Center	3,000 sq. ft.
Garden	·

#### Other Considerations

Lobby / CirculationOn-Site ParkingRestroomsLoading ZoneMechanical / Electrical / Plumbing ServicesBudget \$650/sfGeneral Storage

# **Project Schedule**

Sept. 22	Thursday	FIRST QUARTER REVIEW
Oct. 13	Thursday	MID-TERM REVIEW
Nov. 10	Thursday	THIRD QUARTER REVIEW
Dec. 14	Wednesday	FINAL REVIEW OF PROJECT

• Documentation of Accessibility & Life Safety

# **Final Review Requirements**

# **Drawings**

<ul><li>Existi</li></ul>	ng Site	Photogr	aphy

Existing Site Photography	
Conceptual Diagrams	N.T.S.
(ie. site/context response, program, concept, circulation, environmental, structural logic	, etc.)
Contextual Site Plan	1"=200'-0"
Site Plan	1/64"=1'-0"
Floor Plan (one per floor)	1/8"=1'-0"
Exterior Elevations (each elevation)	1/8"=1'-0"
Building Sections including Site (minimum of 3)	1/8"=1'-0"
<ul> <li>Rendered Enlarged Elevation (portion of overall elevation)</li> </ul>	3/4"=1'-0"
Wall Section (cut at an interesting spatial composition)	3/4"=1'-0"
Exterior Rendered Perspectives (3 minimum)	N.T.S.
Interior Rendered Perspective (2 minimum)	N.T.S.
<ul> <li>Documentation of Sustainable Aspect</li> </ul>	N.T.S.
Documentation of Structural Systems	N.T.S.
<ul> <li>Documentation of Environmental Systems</li> </ul>	N.T.S.

# **Models**

(Note: All models shall be basswood only. No balsa wood, museum board, chipboard, crescent board, etc. will be accepted. Additional accent materials must be discussed with the instructor prior to model fabrication.)

N.T.S.

Site Context Model	1"=200'-0"
(fabrication of site model may be a group effort and shared by all)	
Immediate Site Model	1/32"=1'-0"
(building site only – show site features)	
Building Model	1/8"=1'-0"
Wall Section Model	3/4"=1'-0"

#### **SYLLABUS**

#### ARCH 7013 - ADVANCED ARCHITECTURE DESIGN SEMINAR III

Department of Architecture • CCFA • The University of Memphis

Fall 2011 (Syllabus - issue date 30 August 2011) (TENTATIVE - Subject to Revision)

Section 001: Studio 6:30pm - 7:25pm Tuesday, Wednesday, & Thursday Room Jones 402

Instructor: tim michael Office: Jones 308

Tuesday, Wednesday & Thursday, 10:30pm – 11:00pm, and by appointment Office Hours:

Telephone: 901.507.4413 (office) or 901.527.3560 (office)

E-mail: tmichael@archimania.com

CATALOG: Offered in conjunction with advanced studio problems in architecture; changing topics

address a variety of critical and ideological constructs; emphasizes comprehensive design.

COREQUISITE: ARCH 7713. PREREQUISITES:

OVERVIEW: This seminar accompanies studio and covers topics related to work being undertaken

within studio. Topics change weekly and cover a variety of scope from conceptual and

theoretical to refined and pragmatic.

POLICIES: 1. The guidelines for studio conduct outlined in the Department of Architecture Studio

Rules shall be observed at all times.

2. Attendance at all course sessions and full participation in sessions are required in accordance with the Department of Architecture Attendance and Participation Policy.

- 3. Cellular telephones and paging devices must be turned off during class. Exceptions may be granted in advance for special circumstances.
- 4. Students are expected to complete all assignments in a timely and professional manner.
- 5. Each assignment must be submitted in its original form and will be retained by the Department of Architecture. All projects are to be photographed by the student for possible inclusion in portfolios. A CD of images of each project must be submitted at the end of the term for retention by the Department.
- 6. Posting information on-line shall be considered the same as a handout.
- 7. Transmittal of information via e-mails shall be considered the same as a handout or announcement in class. The University of Memphis e-mail address will be used.
- 8. Reasonable and appropriate accommodations will be provided to students with disabilities who present a memo from Student Disability Services (SDS). Students who request disability accommodations without a memo will be referred to SDS. http://www.memphis.edu/sds/faculty/ada504.php.
- 9. Academic Dishonesty. Because architecture and interior design are professions regulated by state legislation and with a code of ethics governing professional conduct, similar rules and protocols are in effect in the design studios and classes as well as other education-related environments. The Honor Code of the University of Memphis Department of Architecture states: "I will not lie, cheat, or steal nor tolerate those who do." Students must also abide fully by the policies, rules, and regulations set forth in the Department of Architecture Student Policies Manual and the applicable documents of the University of Memphis. Among these are the Code of Student Rights and Responsibilities and the University of Memphis Code of Student Conduct - Academic Dishonesty. More

information on these codes may be found at the following websites: <a href="http://saweb.memphis.edu/judicialaffairs/csc/CSRR.pdf">http://saweb.memphis.edu/judicialaffairs/csc/CSRR.pdf</a> and <a href="http://saweb.memphis.edu/judicialaffairs/dishonesty/definitions.htm">http://saweb.memphis.edu/judicialaffairs/dishonesty/definitions.htm</a>.

#### **OBJECTIVES**

- 1. Supplement studio work with a knowledge base gathered through readings and research projects within seminar.
- 2. Expose oneself to the architectural theories and practices of some of the world's leading architects practicing today.

#### NAAB CRITERIA:

This course addresses the following NAAB Student Performance Criteria at the level indicated:

A.3 – <u>Visual Communication Skills</u>: *Ability* to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.

A.9 – <u>Historical Traditions / Global Culture</u>: <u>Understanding</u> of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of climatic, ecological, technological, socioeconomic, public health, and cultural factors.

A.10 – <u>Cultural Diversity</u>: Understanding of the diverse needs, values, behavioral, norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implications of this diversity on the societal roles and responsibilities of architects.

# INSTRUCTIONAL METHODOLOGY

This course is a seminar and shall be conducted in such a manner. In order to gain the most from the class and make it an enjoyable experience, everyone's participation is required and welcomed. Classes will be a mix of lectures, formal discussions, formal student presentations, and informal talks centered around topics relative to studio and the state of architecture today.

Research Projects: The seminar is closely coupled with the studio, and as such, the two will often overlap. Research projects aimed at driving the studio design project, yet also centered around the NAAB requirements for this course, will be assigned within studio as well as within this seminar. For each research project, each student will be expected to make a formal presentation of their work to the entire class.

*Readings:* These will be distributed weekly by the instructor as they relate to the overall progression and considerations of studio projects. It is expected that each student read the handouts and be prepared for discussion during class on the designated date.

*Discussions:* Discussions are meant to be collaborative and inclusive, with an open dialogue centered around relevant issues of the readings, problems, or projects. In some cases, slides will be integral with the discussion and handouts, and offer visual reference to the topics of discussion. Students are expected to participate fully in discussions.

#### **REQUIREMENTS:**

The assignments denoted below constitute the majority of the class requirements. Additional information and assignments will be given in separate handouts.

Research Projects 70% Readings 15% Discussions / Participation 15%

#### **GRADING:**

As per the University and Department standards, students must receive a minimum grade of "C" in courses taken within their major; grades lower than "C" (i.e. "C-" and below) will require that the class be repeated. All assignments must be completed on time – late work will NOT be accepted.

1. Grading Scale: The University stipulated plus/minus grading scale is utilized in this studio. A grade of C- represents the fulfillment of all project requirements at a minimum level. A grade of B or A represents the fulfillment of all project requirements with an above-average and superbly detailed level of inquiry and investigation, respectively. The overall general grading scale is as follows:

90 - 100% A 80 - 89% B 70 - 79% C 60 - 69% D 59 - below F

#### TEXTBOOKS:

Thinking Architecture, Peter Zumthor (recommended)

Supplemental readings drawing from a variety of sources will be distributed by the instructor.

#### **RELEASE FORMS:**

The Department of Architecture Release / Hold-Harmless Agreement must be completed and signed by each student before taking any off-campus trips, including trips within Memphis. The Medication Release Form must be completed for any out-of-town trips. Students must print and complete the forms during the first week of classes and submit them to the instructor. These forms may be found at <a href="http://architecture.memphis.edu/TravelRelease.pdf">http://architecture.memphis.edu/TravelRelease.pdf</a>

# SCHEDULE ARCH 7013 - ADVANCED ARCHITECTURAL DESIGN SEMINAR III Fall 2011 (issued 30 August 2011)

Aug.	30 31	T W	Introductions / Syllabus / Schedule
Sept.	1 3 6 7 8 13 14 15 20 21 22 27 28 29	Th Sat. T W Th T W Th T W Th	B.4 Site Design (Analysis) SITE VISIT B.4 – Site Design (Investigative) A.9 – Historical Traditions / Global Culture (Investigative) A.10 – Cultural Diversity (Investigative)  " " B.4 – Site Design (Presentation) A.9 – Historical Traditions / Global Culture (Presentation) A.10 – Cultural Diversity (Presentation) A.8 – Ordering Systems (Investigative)  " "
Oct.	04 05 06 11 12 13 18 19 20 25 26 27	T W Th T W Th T W Th	B.8 – Environmental Design (Investigative)  A.8 – Ordering Systems (Presentation) B.9 – Structural Design (Investigative)  B.8 – Environmental Design (Presentation) No Class – Fall Break  B.9 – Structural Design (Presentation) A.8 – Ordering Systems (Application)
Nov.	1 2 3 8 9 10 15 16 17 22 23 24 29 30	T W Th T W Th T W Th T W	A.8 – Ordering Systems: Application (Presentation) B.8 – Environmental Design (Application)  " " B.8 – Environmental Design: Application (Presentation) B.9 – Structural Design (Application)  No Class – Thanksgiving Holiday
Dec.	1 6 7 8 13	Th T W Th T	B.9 – Structural Design: Application (Presentation)  Last Day of Class No Class – Study Day Final Exam

# ARCH 7013 / ARCH 7713 - Adv. Architectural Design Seminar / Studio III

Department of Architecture • CCFA • The University of Memphis

#### Assignment #1 – Site Analysis

Part of any great architectural work is its ability to respond the site: taking advantage of ocean views, nestling into a gently sloping hillside, responding to natural light, working within the existing context, minimizing site impact, etc. In order to do so, the architect must study the site and understand it on many different fronts, paying careful attention to slight nuances which make a site very special while also becoming aware of those characteristics which may be less obvious and less desirable.

As a means of beginning the studio project, each student will conduct a thorough analysis of the proposed building site. You will be asked to research the site as much as possible prior to the visit to gain a general understanding of the site and its surroundings, including its location within the city, bounding streets, major neighboring landmarks, major arterial streets, orientation, history of the site and area, etc. While making our visit to the site, each student is encouraged to study the site both from afar and near, simultaneously examining such things as solar exposure and soil composition. It is important to view the site with your building in mind: allow the site to inform the building; look for those things which can drive design decisions down the road regardless of how large or small they may be. Approach the site with an open mind and don't arrive with pre-conceived notions.

Each student will perform his/her own analysis; however, all the analyses will be grouped in the end to form a single large, collective analysis. Each student will select two (2) topics from below to examine while on site. Each student will produce one (1) 24"x36" board explaining his/her findings through the use of words, drawings, diagrams, data charts, maps, photographs, etc. A standard board format should be determined by all the students and each individual presentation utilizes this board format.

- 1. Legal
  - a. Site Boundaries
  - b. Setbacks
  - c. Zoning Designation
  - d. Contextual Zoning
- 2. Climate
  - a. Solar Exposure
  - b. Prevailing Winds
  - c. Rainfall
  - d. Humidity
  - e. Temperature
- 3. Design Guidelines for the area
- 4. Circulation:
  - a. Vehicular Circulation
  - b. Pedestrian Circulation
  - c. Bike Circulation
  - d. Public Transportation
  - e. Volume
- Parking
  - a. On-Street Parking
  - b. Available Parking Nearby
- 6. Neighborhood Context
  - a. Zoning
  - b. Height/Scale
  - c. Materiality
  - d. Condition/Health
  - e. Setbacks
  - f. Landmarks
  - g. Grid / No Grid

- 7. Natural Physical Features
  - a. Topography (Contours)
  - b. Vegetation
  - c. Primary/Notable Features
  - d. Views
  - e. Soil Type/Color
- Man-Made Features
  - a. Buildings
  - b. Foundations
  - c. Fences
- 9. Utilities
  - a. Underground Electrical
    - b. Underground Sewer
    - c. Drainage Infrastructure
    - d. Electrical Supply
    - e. Street Lighting
  - f. Storm Inlets
- 10. Sensory Qualities
  - a. Noise
  - b. Odors
  - c. Air Pollution / Dust
- 11. Human / Cultural
  - a. Demographics
  - b. Socio-Economic Levels of Context
  - c. Cultural Facilities Nearby
  - d. Homelessness
  - e. Education Levels
- 12. Anything else that you observe

# **Assignment Specifics**

Format 24x26 board (full color + uniform board format)

Assigned 01 Sept. 2011 Due 08 Sept. 2011

# **NAAB Student Performance Criteria**

This assignment satisfies all or part of the following SPC:

- A.3 <u>Visual Communication Skills</u> *Ability* to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.
- B.4 <u>Site Design</u>: *Ability* to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

# ARCH 7013 / ARCH 7713 - Adv. Architectural Design Seminar / Studio III

Department of Architecture • CCFA • The University of Memphis

#### Assignment #1 – Site Analysis

Part of any great architectural work is its ability to respond the site: taking advantage of ocean views, nestling into a gently sloping hillside, responding to natural light, working within the existing context, minimizing site impact, etc. In order to do so, the architect must study the site and understand it on many different fronts, paying careful attention to slight nuances which make a site very special while also becoming aware of those characteristics which may be less obvious and less desirable.

As a means of beginning the studio project, each student will conduct a thorough analysis of the proposed building site. You will be asked to research the site as much as possible prior to the visit to gain a general understanding of the site and its surroundings, including its location within the city, bounding streets, major neighboring landmarks, major arterial streets, orientation, history of the site and area, etc. While making our visit to the site, each student is encouraged to study the site both from afar and near, simultaneously examining such things as solar exposure and soil composition. It is important to view the site with your building in mind: allow the site to inform the building; look for those things which can drive design decisions down the road regardless of how large or small they may be. Approach the site with an open mind and don't arrive with pre-conceived notions.

Each student will perform his/her own analysis; however, all the analyses will be grouped in the end to form a single large, collective analysis. Each student will select two (2) topics from below to examine while on site. Each student will produce one (1) 24"x36" board explaining his/her findings through the use of words, drawings, diagrams, data charts, maps, photographs, etc. A standard board format should be determined by all the students and each individual presentation utilizes this board format.

- 1. Legal
  - a. Site Boundaries
  - b. Setbacks
  - c. Zoning Designation
  - d. Contextual Zoning
- 2. Climate
  - a. Solar Exposure
  - b. Prevailing Winds
  - c. Rainfall
  - d. Humidity
  - e. Temperature
- 3. Design Guidelines for the area
- 4. Circulation:
  - a. Vehicular Circulation
  - b. Pedestrian Circulation
  - c. Bike Circulation
  - d. Public Transportation
  - e. Volume
- Parking
  - a. On-Street Parking
  - b. Available Parking Nearby
- 6. Neighborhood Context
  - a. Zoning
  - b. Height/Scale
  - c. Materiality
  - d. Condition/Health
  - e. Setbacks
  - f. Landmarks
  - g. Grid / No Grid

- 7. Natural Physical Features
  - a. Topography (Contours)
  - b. Vegetation
  - c. Primary/Notable Features
  - d. Views
  - e. Soil Type/Color
- Man-Made Features
  - a. Buildings
  - b. Foundations
  - c. Fences
- 9. Utilities
  - a. Underground Electrical
    - b. Underground Sewer
    - c. Drainage Infrastructure
    - d. Electrical Supply
    - e. Street Lighting
  - f. Storm Inlets
- 10. Sensory Qualities
  - a. Noise
  - b. Odors
  - c. Air Pollution / Dust
- 11. Human / Cultural
  - a. Demographics
  - b. Socio-Economic Levels of Context
  - c. Cultural Facilities Nearby
  - d. Homelessness
  - e. Education Levels
- 12. Anything else that you observe

# **Assignment Specifics**

Format 24x26 board (full color + uniform board format)

Assigned 01 Sept. 2011 Due 08 Sept. 2011

# **NAAB Student Performance Criteria**

This assignment satisfies all or part of the following SPC:

- A.3 <u>Visual Communication Skills</u> *Ability* to use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.
- B.4 <u>Site Design</u>: *Ability* to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

# ARCH 7713 - Adv. Architectural Design Studio III

Department of Architecture • CCFA • The University of Memphis

#### Assignment #2 - Photography Museum + Culture: Case Studies of Building Type + Subject Matter

This assignment is to be performed as an initial exercise in preparation for the studio project: Eggleston Museum. It is a two-part assignment and will involve the study of a built work of architecture as well as the study of works by William Eggleston. For part one, each student shall select one building from the list below and perform a case study on the building paying particular attention to not only the physical design and how it displays works of art, but also the concepts and pre-design intent involving the history and culture of the place in which it is located. Each study shall include the following as a minimum:

Basic Building Info (Location, Architect, Size)
Design Concept (Diagrams)
Response to Site / Context
Structural System
Primary Materials (Interior and Exterior)
Circulation Methodology
Means of displaying art

Types of HVAC Systems
Humidity Control (?)
Natural Lighting (?) – How is it controlled?
Cultural Factors which shaped design
Response to Historical Precedent
Socioeconomic Factors of context
Integration into landscape (?)

Part two of this assignment directly relates to the work of artist William Eggleston. Each student will select 3 photographs by Eggleston and perform a detailed analysis of each, examining both the physical make-up of the work as well as the thoughts, concepts, and cultural factors that influenced the making of the photograph. Each photograph study should include the following as a minimum:

Basic Photograph Info (Name, date, where taken, developing/printing process)
Artist's intent of photo (What is the artist trying to convey thru the image)
Explanation of Color
Explanation of Composition
Artist comments
Cultural influences surrounding image

**Format of Presentation:** Digital Powerpoint on an 8-1/2"x11" LANDSCAPE format

(hard copy print of slides due at time of presentation)

Date Assigned: 13 Sept. 2011 Date Due: 21 Sept. 2011

#### **Potential Candidates for Study:**

Ken Domon Museum of Photography (Yoshio Taniguchi) European House of Photography (Ateliers Lion Archtiects) Kiyosato Museum of Photographic Arts (Akira Kuryu + Partners) Photography Museum in Charleroi (l'Escaut Architects) Tokyo Metropolitan Photography Museum International Center of Photography Houston Center for Photography

This assignment satisfies all or part of the following NAAB Student Performance Criteria:

A.9 – <u>Historical Traditions / Global Culture</u>: <u>Understanding</u> of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of climatic, ecological, technological, socioeconomic, public health, and cultural factors.

A.10 – <u>Cultural Diversity</u>: Understanding of the diverse needs, values, behavioral, norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implications of this diversity on the societal roles and responsibilities of architects.

# ARCH 7013 / 7713 - Adv. Architectural Design Seminar & Studio III

Department of Architecture • CCFA • The University of Memphis

#### **Assignment 4: Ordering Systems**

Man has always sought order when attempting to define space and make inhabitable forms. While there exists today an apparent disregard for order by many leading architects, order has not been abandoned nor forgotten, but rather explored and presented within a different paradigm. Many of today's buildings are, in fact, extremely ordered through the employment of complex mathematical algorithms or data-intensive digital fabrication. Regardless of whether by traditional means (grid, axis, symmetry, etc.) or by contemporary technological components, ordering systems remain a vital tool in driving the designs of buildings and landscapes today.

For this exercise, you will be asked to study both a building and a landscape in terms of their ordering systems. Each student will present his/her research thru the plans, elevations, diagrams, and other drawings which distill the complexity of the buildings/landscapes into a format which is easily understandable and highlights the critical items at hand. This is a research exercise and will require close observation of the projects in order to generate the diagrams that so easily explain what is not so easily seen.

Each student is encouraged to study spatial relationships as well orderings systems such as: grid, axis, symmetry, hierarchy, rhythm/repetition, datum, transformations within the previously mentioned items, and any other systems which may have been employed as a means of ordering the building. Diagrams and other drawings produced as a means of explaining such systems shall be presented to the class in the form of an electronic PowerPoint presentation.

Each student shall select two buildings and one landscape from the following:

Building: Museum of Contemporary Art – Barcelona, Spain (Richard Meier)

First Unitarian Church – Rochester, New York (Louis Kahn) Unite d' Habitation – Marseilles, France (LeCorbusier)

Carpenter Center for the Visual Arts – Cambridge, Massachusetts (LeCorbusier) Museum of Modern Literature – Marbach am Neckar, Germany (David Chipperfield)

Caja Granada – Granada, Spain (Alberto Campo Baeza)

The MA: Andalucia's Museum of Memory – Granada, Spain (Alberto Campo Baeza)

Stockholm Public Library – Stockholm, Sweden (Gunnar Asplund)

Casa del Fascio – Como, Italy (Guiseppe Terragni)

Toledo Museum of Art: Glass Pavilion - Toledo, Ohio (SANAA)

Landscapes: Parc de' Laville – Paris, France (Bernard Tschumi)

Uffizi Palace - Florence, Italy (Georgio Fasari)

Memorial to the Murdered Jews of Europe – Berlin, Germany (Peter Eisenman) Citygarden – St. Louis, Missouri (Nelson Byrd Woltz Landscape Architects)

Seattle Art Museum Olympic Sculpture Park - Seattle, Washington (Weiss/Manfredi)

Format: Projects Images, diagrams, drawings, etc. presented electronically via PowerPoint

(Send instructor a pdf of presentation on due date)

Date Assigned: Tuesday Oct. 11, 2011 Date Due: Tuesday Oct. 25, 2011

# ARCH 7013 / 7713 - Adv. Architectural Design Seminar & Studio III

Department of Architecture • CCFA • The University of Memphis

#### Assignment 5: Building Structure

This exercise involves the study and documentation of a building's structure in order to assist in the design of a structural system for your studio project. This exercise is not intended to guide one toward any particular structural system, but offer an understanding of multiple means of structuring a building where the logic applied within a case study could be also applied to a studio project, regardless of material or system.

Each student is required to study and document the structural system(s) of a building listed below. Investigations should pay particular attention to the following:

- 1. Type of Structural System and Material (Post and Beam, Frame and Infill, Frame & Cladding, Loadbearing, Structural Diaphram, etc)
- 2. Structural Anomalies (What are the unique features which run counter to a primary structural logic? How are such anomalies supported?)
- 3. New Technologies or Systems employed to structure the building
- 4. Complex Connections or Intersections

Each student will select two buildings from the list below and generate one (1) 24x36 board that shows evidence of intense investigation into the buildings' structural system. Both projects will be presented on the same board and include the following:

- 1. Building Name, Location, Architect, and Structural Engineer (if possible)
- 2. Written description explaining structural system, including those items listed above.
- 3. Structural "Diagram" in the form of an exploded axonometric produced using computer software

Buildings: Salk Institute – La Jolla, CA (Louis Kahn)

Ballard Library and Neighborhood Service Center – Seattle, WA (Bohlin Cywinski Jackson) Trumpf Campus Restaurant w/ Auditorium – Ditzingen, Germany (Barkow Leibinger)

Des Moines Public Library – Des Moines, IA (David Chipperfield)

Baumschulenweg Crematorium - Berlin, Germany (Axel Schultes & Charlotte Frank)

Rosenthal Center for Contemporary Art – Cincinnati, OH (Zaha Hadid) River & Rowing Museum – Oxfordshire, United Kingdom (David Chipperfield)

Poetry Foundation – Chicago, IL (John Ronan) Sendai Mediatheque – Sendai-shi, Japan (Toyo Ito)

Oxbow School - Napa, CA (Stanley Saitowitz / Natoma Architects Inc.)

Format: (1) 24x36 printed board

(Send instructor a pdf of board on due date)

Date Assigned: Wednesday Nov. 2, 2011 Date Due: Thursday Nov. 10, 2011

# ARCH 7013 / ARCH 7713 - Adv. Architectural Design Seminar / Studio III

Department of Architecture • CCFA • The University of Memphis

#### Assignment #6 - Sustainability

This is a two part assignment centered around sustainability, specifically the Leadership in Energy and Environmental Design, or LEED, as well as specific sustainable aspects regarding ones studio project.

For part one of the assignment, everyone should review the basics of LEED as outlined on the USGBC website (<a href="http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1988">http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1988</a>). As part of this review, each student should become familiar with the 2009 LEED checklist for New Construction and Major Renovations. This checklist highlights the available points available within 8 categories. Each student is to review the specific credit items within the 8 categories and temporarily mark those which apply to the design of his/her building and/or site. After these initial credit items have been identified from the checklist, each student should then open the LEED 2009 for New Construction and Major Renovations Rating System document (<a href="http://www.usgbc.org/ShowFile.aspx?DocumentID=8868">http://www.usgbc.org/ShowFile.aspx?DocumentID=8868</a>) and research in-detail the requirements for each of these credits initially selected from the checklist. If, after reviewing the rating system document and subsequent explanations for the credits, each student feels that his/her building satisfies the requirements of said credits, then each student shall permanently mark the checklist credit item and calculate it into the total sum of points.

After all credit items have been verified and points allotted from the checklist, each student should then add the total number of credits to arrive at a total sum. This total sum should then be compared against the point totals at the bottom of the checklist. LEED *Certified* will receive between 40-49 points. LEED *Silver* will receive between 50-59 points. LEED *Gold* will receive between 60-79 points. LEED *Platinum* will receive between 80-110 points.

After each student has determined the rating status of his/her building, they are to generate an itemized list of said points and category headings on their presentation boards. This list should also include the total number of achieved points and the resulting rating status for the building.

The second part of this assignment intends to offer evidence of the inclusion of such sustainable characteristics within the building. For this portion of the assignment, each student is asked to diagram the various systems or characteristics which afford the LEED rating. These diagrams are not intended to reference the LEED rating system specifically, but are intended as a general means of explaining how such points have been achieve thru the inclusion of sustainable building design. Diagrams are not specific in format, but they should be computer-generated and accompany the LEED checklist items and point totals on the presentation boards.

# **Assignment Specifics**

Format

- Typed LEED checklist and point totals on presentation boards (using an architectural font matching other text on board)
- Computer-generated diagrammatic drawings highlighting the key sustainable characteristics of

the building design

Assigned 08 Nov. 2011

Due 17 Nov. 2011 (3<sup>rd</sup> review)

#### **NAAB Student Performance Criteria**

This assignment satisfies all or part of the following SPC:

A.5 - Investigative Skills

- Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

B.3 - Sustainability

- Ability to design projects that optimize, converse, or reuse natural or 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.

# ARCH 7013 / ARCH 7713 - Adv. Architectural Design Seminar / Studio III

Department of Architecture • CCFA • The University of Memphis

#### Assignment #7 - Environmental Systems

For this assignment, each student is required to study the various mechanical systems typically used for commercial buildings of a size similar to the Eggleston Museum, approximately 25,000 sf. Such systems are typically forced-air systems that required standard pieces of equipment to generate both heated and cooled air that is "forced" through a system of ductwork throughout the building. Various methods are used to both heat and cool the air, but the most common is a chiller for cooling and a furnace for heating. Both of these pieces of equipment are used in conjunction with an air handling unit (AHU) to supply conditioned air within the building. Alternative pieces of equipment have been developed which may prove more sustainable, and students are encouraged to research such equipment to verify it a viable option for a building of this size and complexity.

As a product of the research, each student shall determine the best hvac system for his/her building and make spatial accommodations for such a system within both the floor plans (by way of adequately sized mechanical room[s]) as well as sections (by way of adequate plenum space above ceilings or below floors). Floor plans should reflect primary pieces of equipment (ahu, chiller, furnace, etc.) within mechanical rooms and contain labeling of rooms as such. It should also be noted that any vertical chases required to move air (via ducts) vertically through the building should be shown on the plans as well.

In addition to including mechanical rooms, proper labeling of said rooms, and any required chases in all plans, each student shall develop a schematic layout, or mechanical plan, of ductwork with the building. This mechanical plan shall be documented as a diagram for inclusion into the final graphic presentation. Duct sizes are not required; however, the diagram should indicate adequate coverage of all interior spaces and represent those ducts which run above ceilings in a different manner than those ducts which run below any floors. Each floor within the building is required to have an "environmental systems" diagram showing the duct layout for that particular floor.

#### **Assignment Specifics**

Format

- Drawing modifications to include mechanical rooms, proper room labeling, and required chases within the building plans. Building sections should reflect adequate plenum space above ceilings or below floors for the inclusion of ductwork such that is does not conflict with structure, lighting, or other systems.
- "Environmental Systems" diagrams demonstrating the duct layout for each floor

Assigned 17 Nov. 2011 Due 29 Nov. 2011

### **NAAB Student Performance Criteria**

This assignment satisfies all or part of the following SPC:

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, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.

# ARCH 7013 / ARCH 7713 – Adv. Architectural Design Seminar / Studio III

Department of Architecture • CCFA • The University of Memphis

Assignment #8 - Accessibility + Vertical Transportation + Fire Protection + Security/Communication + Life Safety

For this assignment, each student is required to study the following topics for inclusion within the studio project: Accessibility, Vertical Transportation, Fire Protection, Security/Communication, and Life Safety. These items are discussed a bit more below followed by an explanation of the required documentation of each within the graphic presentation of the studio project.

#### Accessibility

Studio projects shall be designed to meet the minimum requires of the Americans with Disabilities Act (ADA). In doing so, students should pay particular attention to stairs, ramps, and clearance issues, ensuring that all public spaces of the buildings are accessible. Any required ramps should have a minim slope of 1:12 with proper landing design. Stairs should demonstrate proper riser heights and tread widths along with correct guardrail and handrail design. All doors should demonstrate proper push/pull clearances and restrooms should be fully accessible. Documentation: Graphical presentations should reflect these ADA considerations along with the inclusion of a 5' turning radius in all restrooms, 5'x5' handicap toilet stalls, and 30"x48" clear floor areas at all lavatories and drinking fountains.

#### **Vertical Transportation**

Studio projects shall be designed to include accessible vertical transportation systems within all buildings of two or more stories. Three basic types of passenger elevators exist today: Traction, Hydraulic, and Machine Roomless. Each of these three have advantages over the others and should be well considered before being implemented. Traction elevators are the oldest form of elevator and utilize typical cables and pulleys to move the cab vertically. They are often employed within multi-level buildings and move with great speed. Hydraulic elevators are typically reserved for low buildings of two or three floors and feature a piston which pushes the cab vertically. Hydraulics are slow-moving yet affordable. The newest form of elevator is the machine roomless type. Within this elevator, the lifting mechanism is either attached to the top of the shaft or the top of the cab itself. It utilizes a motor that winds belts to pull the cab vertically within the shaft. Each student should further research these elevator types and make a selection for the museum. In doing so, spatial accommodations should be made in plan for any required machine rooms.

#### Fire Protection Systems

Any museum housing significant works of art likely to house a fire protection system, consisting of such things as detection devices, alarms, and suppression devices. Museums are unique in that the artifacts within are extremely valuable and cannot be damaged or destroyed either fire or the water used to suppress the fire. Thus, museums often utilize chemical suppressants which protect the artifacts but pose other problems, particularly dangers to humans. Each student should further research fire protection systems and make a selection on the best type to suit the studio project. In doing so, spatial accommodations should be made in plan for any required standpipes, master controls, and other required equipment.

#### Security/Communication

In many commercial buildings, security and communication systems are often handled or designed by third-party suppliers hired directly by building owners or the contractor. However, a museum typically features a more integrated system due to the nature of objects housed within. Security is often quite stringent and well controlled within museums and features an elaborate network of docents, cameras, barcoding, readers, lasers, etc. Coordination and control of such a network is often housed within a central command center by museum staff. Each student should further research the requirements of typical security and communication systems for museums. In doing so, spatial accommodations should be made for any required command centers or other items.

#### Life Safety

Buildings are designed for many reasons, one being to get people out of the building should it fail. Life safety drives buildings codes which heavily influence building design. Codes are written around egress and providing safe and adequate means of getting people out of the building. Each student is required to develop a life safety plan diagram showing proper egress routes from the building with adequate number of egress doors.

# **Assignment Specifics**

• Drawing modifications to include accommodations for accessibility, vertical transportation, fire

protection, and security/communication.

• Life safety plan diagram showing proper egress paths, travel distances, and adequate number of

doors.

Assigned 17 Nov. 2011 Due 29 Nov. 2011

# **NAAB Student Performance Criteria**

This assignment satisfies all or part of the following SPC:

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.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.

#### **COURSE SYLLABUS**

#### ARCH 7712 - Advanced Architectural Design II Studio

Department of Architecture 

College of Communication & Fine Arts 

University of Memphis

Fall 2011 (issue date 13 January 2011 – subject to revision)

Section 001: 2:00pm - 5:00pm Monday/Wednesday/Thursday Room JO 401

Instructor: Michael Chisamore

Office: JO 411

Office Hours: please see schedule on office door Telephone: 901.678.4914 (office), 901.678.1755 (FAX)

E-mail: mkchsmre@memphis.edu

CATALOG:

Advanced studio problems in architecture; changing topics address a variety of critical and ideological constructs; emphasizes structural and environmental issues as design determinants. 6 credit hours.

PREREQUISTES:

Permission of the instructor

**COREQUISITE:** 

ARCH 7511

**POLICIES**:

- 1. The guidelines for studio conduct outlined in the Architecture Program Studio Rules shall be observed at all times.
- 2. Attendance and participation at all class sessions are required in accordance with the Department of Architecture Attendance and Participation Policy.
- 3. Cellular telephones and paging devices must be turned off during class. Exceptions may be granted in advance for special circumstances.
- 4 All students are expected to complete all assignments in a timely and professional manner.
- 5. Each assignment must be submitted in its original form and will be retained by the Department of Architecture. All projects are to be photographed and a CD of images of each project submitted at the end of the term for retention by the Department.
- 6. Posting information on-line shall be considered the same as a handout.
- 7. Transmittal of information via e-mails shall be considered the same as a handout or announcement in class.
- 8. Reasonable and appropriate accommodations will be provided to students with disabilities who present a memo from Student Disability Services (SDS). Students who request disability accommodations without a memo will be referred to SDS.

9. Academic Dishonesty. Because architecture and interior design are professions regulated by state legislation and with a code of ethics governing professional conduct, similar rules and protocols are in effect in the design studios and classes as well as other education-related environments. The Honor Code of the University of Memphis Department of Architecture states: "I will not lie, cheat, or steal nor tolerate those who do." Students must also abide fully by the policies, rules, and regulations set forth in the Department of Architecture Student Policies Manual and the applicable documents of the University of Memphis. Among these are the Code of Student Rights and Responsibilities and the University of Memphis Code of Student Conduct – Academic Dishonesty. More information on these codes may be found at the following websites: (http://saweb.memphis.edu/judicialaffairs/csc/CSRR.pdf) and (http://saweb.memphis.edu/judicialaffairs/dishonesty/definitions.htm).

#### **EDUCATIONAL OBJECTIVES:**

By the end of this course of study a student should be able to:

- Evaluate various environmental strategies and building systems critically with regard to their experience, design/cultural language and ability to meet the needs of their intended users and apply in a design situation,
- Analyze the societal, economic and urban implications of sustainable systems,
- Relate contemporary urban principles to design situations,

#### **NAAB CRITERIA:**

This course addresses at a minimum the following NAAB Student Performance Criteria: 1,2,3,4,5,7,14,15,16,18,19,32,33 and 34

For additional information, visit the NAAB website at http://www.naab.org.

#### **INSTRUCTIONAL METHODOLOGY:**

The course is organized around a series of exercises tied to the thematic topics of the course. Illustrated oral presentations of case studies, readings and discussions will supplement.

*Design Projects:* Design projects of various scales and complexity will be assigned to allow students to apply urban design principles and elements.

Written Assignments/Field Trips: A series of field trips will be taken and written assignments will be given to measure understanding of ideas, development of skills, and so forth.

*In-class Skill-building Exercises:* A series of in-class exercises will be conducted to increase the student's ability to express design ideas both graphically and verbally.

**EVALUATION and** GRADING:

All work must be complete and submitted on time – no late work will be accepted.

As per the Department of Architecture and University of Memphis standards, graduate students must maintain an overall GPA of 3.0 (B). Grades of D and F will not apply toward any graduate degree, but will be computed in the GPA. No more than seven hours of C+, C, or C-will be applied towards meeting graduate degree requirements.

1. Breakdown:

Research and Analysis Assignments: 20%

Projects: 70%

Attendance and Class Participation: 10%

100%

2. Grading Scale: The University plus/minus grading scale will be utilized in this course. The overall grading scale is as follows:

98 - 100% A+ 94 - 97% Α 90 - 93% A-87 - 89% B+ 84 - 86% В B-80 - 83% C+ 77 - 79% 74 - 76% С C-70 - 73% 65 - 69% D+ 0 - 64% D 60 - below

**TEXTBOOKS:** Readings from a variety of sources will be assigned.

NOTE: Textbooks from previous Architecture Program will be used periodically and must be in the studio.

ATTACHMENTS: Architecture Rules of Conduct, Architecture Attendance & Participation Policy

**SEPARATE COVER:** Schedule, Assignments

ARCH 7712 - Advanced Architectural Design II Studio 2011

, , ,		0-40	Looking (Direction Tomic
week		Dale 43.	recture/ priscussion Libbic
-		13-Jan	Introduction - Materials Project
2	Σ	17-Jan	Desk Crit
	Λ	19-Jan	Desk Crit
	⊢	20-Jan	Materials Project Critique
æ	Σ	24-Jan	Experiencing Sections Hand-out
	8	26-Jan	Desk Crit
	T	27-Jan	Desk Crit
4	Σ	31-Jan	Desk Crit
	Μ	02-Feb	Experiencing Sections Critique
	⊢	03-Feb	Memphis Art Park Final Hand-out
5	Σ	07-Feb	Law School Tour
	≷	d9-Feb	Site Visit and analysis
	ь	10-Feb	Desk Crit
9	Σ	14-Feb	Lecture - Urban Phenomenology III
	Λ	16-Feb	Desk Crit
	⊢	17-Feb	Desk Crit
7	Σ	21-Feb	Desk Crit
	≷	23-Feb	Desk Crit
	1	24-Feb	Concept Design Pin-up, in-house
8	Σ	28-Feb	Desk Crit
	Α	02-Mar	Desk Crit
	1	03-Mar	Concept Design Pin-up, with client
6	Σ	07-Mar	
	≷	09-Mar	
	ı	10-Mar	Spring Break
10	Σ	14-Mar	Desk Crit
	≷	16-Mar	Desk Crit
	⊢	17-Mar	Desk Crit
11	Σ	21-Mar	Schematic Design Pin-up, in-house
	⋧	23-Mar	Desk Crit
	T	24-Mar	Desk Crit
12	Σ	28-Mar	Desk Crit
	≷	30-Mar	Desk Crit
	ı	31-Mar	Mid Project Critique
13	Σ	04-Apr	Desk Crit
	×	06-Apr	Desk Crit
	⊢	07-Apr	Desk Crit
14	Σ	11-Apr	Desk Crit
	×	13-Apr	Desk Crit
	T	14-Apr	Desk Crit
15	Σ	18-Apr	Drawings Due
	≯	20-Apr	Desk Crit
	⊢	21-Apr	Desk Crit
16	Σ	25-Apr	Project Due
	≷	27-Apr	27-Apr Memphis Art Park Final Critique

# ADVANCED ARCHITECTURAL STUDIO II

University of Memphis

Department of Architecture

Spring 2010

# A SPACE FOR COLABORATION: University of Memphis Ventures Lab Project Handout (2/11/10, revised 3/14)

#### **Background**

Since 1959, when Joseph Mancuso opened the Batavia Industrial Center in a warehouse in Western New York, groups interested in the growth of community businesses have tried and tested several models for the encouragement of entrepreneurial ventures. While all encouraging growth of start-up businesses, facilities have tended to be sponsored by groups with a varying set goals, organizational structure and target user. Incubator programs have been started specializing in high-tech, art or artisan, bio-medical, non-profit. Sponsoring organizations can be chambers of commerce, local or state governments, large corporations, and religious or educational institutions.

Higher education has played a major role in incubator formation, innovating the process and the building type. Universities such as Farleigh Dickenson, UNC Chapel Hill Georgia Tech, and the Rochester Institute of Technology/University of Rochester, have well established programs each with a uniqueness reflecting the founding institution's organizational objective and character.

### **Project**

Our project for the remainder of the semester will be to design an incubator building utilizing an existing building on Walker just off the University of Memphis campus. Until it was acquired by the university, the existing building was used as a Masonic temple. Our job is to define a program and a vision to the FedEx Institute of Technology for what such a building would be like. Funding is very limited, so the project will need to be approached as a multi-phase construction. The first phase should look at what are the minimum requirements to utilize the existing building for office space. The second phase (or more) will look at expanding the building to incorporate additional office space, expanded socal collaborative space and a rapid prototyping area.

Foremost in the minds of the Institute is the collaborative nature of successful incubator facilities. While providing conditions favorable to start-up business growth through shared services is the practical goal, this facility should be a "hot house" of innovative thinking. A place where people of differing interests and backgrounds will meet and new synergetic relationships can form. Adding to this mix of occupants will be entrepreneurial mentors, accountants and patent lawyers, who will meet with occupants on a regular basis in the facility.

In keeping with the stated objectives of our studio class, our additional focus will involve the relationship of the building to the users, the university, the neighborhood and ultimately the city. These relationships will play themselves out in plan as building and site organizations, but also as section and wall section studies. A full integration of sustainable building systems, including envelope systems, will be a major focus of our work, especially as they pertain to the additions to the existing building.

# <u>ADVANCED ARCHITECTURAL STUDIO II</u>

University of Memphis

Department of Architecture

Spring 2010

## **Program**

- 1<sup>st</sup> Phase
  - o 4 small "hot" offices for the first 1-4 months
  - o Management office
    - Receptionist
    - Copy room
    - 20-30 person conference room
    - Storage
    - Manager
    - Assistant manager
  - o Kitchen/Lunch/Coffee
  - o Rental Space
  - o Mentoring Offices
    - Entrepreneurial mentor
    - Legal/Patent Office
    - Business mentors Office
- Later Phases
  - Expanded social (coffee) area with opportunity for display/exhibition
  - Expanded rental space
  - o Rapid Prototyping "high bay" space (see RIT CIMS building)

#### **General Requirements**

- A. LEED Certification Each project must provide documentation showing a minimum LEED level of "certified." Sustainable strategies can be a defining part of the project visually or be transparent to the user. Each designer must decide which aspects of the building will directly contribute to the overall sustainability of the project.
- B. Mechanical Your presentation will include a well documented means for heating, cooling, and ventilating your building. Documentation will include plan, sectional and diagrammatic information sufficient to explain the completeness of your idea.
- C. Structural/Building Systems Each designer will develop a practical and well documented scheme for supporting and enclosing the building. All major building systems should be investigated for their integration in to the project whole.
- D. Each project should fully integrate the existing components of the Masonic Lodge and take a stand about the use of existing structures.
- E. All aspects of the design are required to be fully "visitable" and promote a sustainable life-style for the users of the building and the surrounding area.

### Schedule

February 11<sup>th</sup> Project Handout February 17<sup>th</sup> Site Visit

February 25<sup>th</sup> Site Analysis Critique March 1<sup>st</sup> Precedent Study Presentation

March 4<sup>th</sup> Schematic Review
March 25<sup>th</sup> Mid-Project Review
April 22<sup>nd</sup> Final Review

May 5<sup>th</sup> Project Due with portfolio pages, written program and cost estimate

# ADVANCED ARCHITECTURAL STUDIO II

University of Memphis

Department of Architecture

Spring 2010

### **Minimum Presentation Requirements**

- A. Site Analysis see separate sheet
- B. Precedent Study see separate sheet
- C. Schematic Review
  - a. Massing model with various iterations
  - b. Schematic Diagrams showing:
    - 1. use relationships within the building
    - 2. sustainable strategies
    - 3. relationships between the building and the city
    - 4. phasing
  - c. Concept statement written
  - d. Floor plan and building section
  - e. Site Plan
- D. Design Development Review
  - a. Revised massing model
  - b. Diagrams showing:
    - 1. use relationships within the building
    - 2. individual sustainable strategies
    - 3. relationships between the building and the city
    - 4. phasing
  - c. Revised concept statement
  - d. Floor plans, building sections and building elevations
  - e. Site Plan
  - f. Large scale building sections or models
- E. Final Review
  - a. Plans, Building Sections, Elevations, Site Plans needed to fully describe your design solution
  - b. Sketches, Diagrams, Study Models needed to show your thought process
  - c. Technical Sections, Large Scale Models, Structural Diagrams, Sketches necessary to explain the building systems involved
  - d. Massing Models, Urban Transects, Vignettes that will show the building and its relationship to the life of the city
  - e. Design Statement
- F. Final project
  - a. PDF files of all boards
  - b. PDF file of LEED checklist and reworked Project Program
  - c. Excel File of Square foot estimate of phase 1
  - d. PDF files of Studio Presentation Book template to be provided.

<sup>&</sup>lt;sup>i</sup> Stone, Mary (2008-04-24). "Mancuso, inventor of business incubator, dies". *Rochester Business Journal*. http://www.rbj.net/fullarticle.cfm?sdid=72679. Retrieved 2008-04-24.

# ADVANCED ARCHITECTURAL STUDIO II

University of Memphis

Department of Architecture

Spring 2010



# ADV. ARCH. DESIGN STUDIO II

University of Memphis

Department of Architecture

Spring 2011

# Memphis Art Park – Performing Arts Building (3/10/2011 subject to revision)

**Background:** "Memphis Art Park (MAP) would create a self-sustainable community arts center and public art park in downtown Memphis on the Front Street Promenade.

MAP's mission is to help nurture the artistic and cultural Renaissance of Memphis by:

- offering arts facilities, resources, and downtown visibility for emerging filmmakers, musicians, performing artists, dancers, and visual artists;
- serving as an incubator and collaborative forum for emerging artists, arts groups, and arts-andentertainment-related entrepreneurs;
- providing arts education and community-outreach programs for children; and creating an engaging destination for locals and tourists to enjoy emerging art.

MAP has evolved via input from local artists and arts organizations, public feedback, city guidance, and the vision of Memphis as an arts & culture hub.

### Memphis and MAP:

The downtown Promenade was set aside upon the founding of Memphis for public use and enjoyment. As a public-use arts park, MAP offers the city a compelling plan that would honor the letter *and* spirit of the Promenade's public-use easement; stimulate our city's arts & culture; further beautify and energize downtown Memphis and its riverfront; and help make Memphis a city of choice among creative people.

With its goal to become a city of choice, Memphis is now looking for ways to retain and attract the creative class. To truly spark a creative movement in Memphis, first support the local creatives who already call Memphis home.

Memphis should be confident in its creative talent. Be proud of them. Invest in them. Nurture them. Showcase them. Help them thrive and build industry. Give them reason to stay. Give them MAP.

MAP would help energize the city's creative class and position Memphis as a thriving arts hub. After all, artistic, innovative, and soulful creativity together have been one of Memphis' strongest assets. It's our city's niche. And while our groundbreaking artistic past is our heritage, today's artists and creative youth are our future.

Incubating and integrating our city's creative class should be top priority. Doing so is the key to both our future and the artistic and cultural renaissance of Memphis. MAP would contribute to this worthy goal. Perched high on our river-bluff -- our city's doorstep -- MAP would announce that Memphis is a distinctive arts destination." From http://www.memphisartpark.org/

**Task:** An important phase of the larger Memphis Art Park will be the renovation of the existing Cossitt Library at the corner of Front and Monroe Streets. Your project will be to adapt the existing building to its new use making spaces that are well suited for their use, visually engaging and incorporating sustainable design. Each interior use/space will need to be successfully related others within the building and the larger urban fabric. You will be graded on the workability and effectiveness of the spaces you design and how well integrated the sustainable, mechanical, and lighting systems are with the spaces.

The project will be broken up into phases of inquiry as a way to collect and manage the information about the building and properly integrate that data into the building designs:

Site Analysis: As an existing historic building that has changed over time, the building has a unique relationship to the site and city both historically and in terms of the urban fabric. Each student will

# ADV. ARCH. DESIGN STUDIO II

University of Memphis

Department of Architecture

Spring 2011

develop a site analysis exploring these relationships in light of their building design. The site analysis will be part of the interim and final presentations.

Building Analysis: At this time there are no existing drawings for this structure. As a class we will be measuring pertinent aspects of the building to conduct our design explorations. Part of our task is to assess what is has historic value and what steps may be taken to practically reuse elements of the building. This will produce a set of field measurements for class use.

Program Development: We will be meeting with John Kirkscey from MAP and representatives of the constituent groups who will be using the building. From these discussion AND your own research each student will develop a program for their project that will evolve over time and handed in at the end of the project. A template for the program will be provided.

Conceptual Design: Using the information gathered from site visits and client meetings each student will develop a conceptual design to be presented to the client. This will consist of a clear concept statement and drawings/models that describe the direction of project exploration and development. Students will be held to their conceptual designs.

Schematic Design: Each student will develop a schematic design that flows from the conceptual design and explores the complete building and its systems to various degrees of detail. Specific presentation criteria will be provided.

Each student's design will address the following issues:

- What about the existing buildings are "historical" and what is the proper response to their historic character?
- What about the existing buildings is (as far as we can tell) structurally sound construction and how does your design use the remaining elements?
- How is the existing building redesigned to fully accommodate the new use?
- What are the implications of the IBC and ADA in the building design?
- What basic seismic amendments need to be done to the buildings?
- How does your design relate to the larger city?
- How have you addressed the experience of the user in your design?

### Calendar (Subject to Revision):

2/3/11 Assignment Date

2/7-2/14 Site and Building Survey with tour of Law school (TBA)

2/16-2/24 Concept and Program Development

3/3 Meeting with John Kirkscey/Conceptual Design Pin-up

3/31 Interim Design Critique

4/25/11 Due Date

4/27/11 Final Critique (tentative date, time and location TBD)

#### **COURSE SYLLABUS**

# ARCH 7012 - Advanced Architectural Design Seminar II

Department of Architecture 

College of Communication & Fine Arts 

University of Memphis

Spring 2011 (issue date 13 January 2011 – subject to revision)

Section 001: 1:00pm – 1:55pm Monday/Wednesday/Thursday Room 402

Instructor: Michael Chisamore

Office: JO 411

Office Hours: please see schedule on office door Telephone: 901.678.4914 (office), 901.678.1755 (FAX)

E-mail: mkchsmre@memphis.edu

CATALOG:

Offered in conjunction with advanced studio problems in architecture; changing topics address a variety of critical and ideological constructs; emphasizes structural and environmental issues as design determinants. 3 credit hours.

PREREQUISTES:

Permission of the instructor

**COREQUISITE**:

ARCH 4822/7712

**POLICIES**:

- 1. The guidelines for studio conduct outlined in the Architecture Program Studio Rules shall be observed at all times.
- 2. Attendance and participation at all class sessions are required in accordance with the Department of Architecture Attendance and Participation Policy.
- 3. Cellular telephones and paging devices must be turned off during class. Exceptions may be granted in advance for special circumstances.
- 4 All students are expected to complete all assignments in a timely and professional manner.
- 5. Each assignment must be submitted in its original form and will be retained by the Department of Architecture. All projects are to be photographed and a CD of images of each project submitted at the end of the term for retention by the Department.
- 6. Posting information on-line shall be considered the same as a handout.
- 7. Transmittal of information via e-mails shall be considered the same as a handout or announcement in class.

- 8. Reasonable and appropriate accommodations will be provided to students with disabilities who present a memo from Student Disability Services (SDS). Students who request disability accommodations without a memo will be referred to SDS.
- 9. Academic Dishonesty. Because architecture and interior design are professions regulated by state legislation and with a code of ethics governing professional conduct, similar rules and protocols are in effect in the design studios and classes as well as other education-related environments. The Honor Code of the University of Memphis Department of Architecture states: "I will not lie, cheat, or steal nor tolerate those who do." Students must also abide fully by the policies, rules, and regulations set forth in the Department of Architecture Student Policies Manual and the applicable documents of the University of Memphis. Among these are the Code of Student Rights and Responsibilities and the University of Memphis Code of Student Conduct Academic Dishonesty. More information on these codes may be found at the following websites: (http://saweb.memphis.edu/judicialaffairs/csc/CSRR.pdf) and (http://saweb.memphis.edu/judicialaffairs/dishonesty/definitions.htm).

#### **EDUCATIONAL OBJECTIVES:**

By the end of this course of study a student should be able to:

- Evaluate various environmental strategies and building systems critically with regard to their experience, design/cultural language and ability to meet the needs of their intended users,
- Analyze the societal, economic and urban implications of sustainable systems,
- Relate contemporary urban principles to design situations,

#### **NAAB CRITERIA:**

This course addresses at a minimum the following NAAB Student Performance Criteria: 15, 18 &19

For additional information, visit the NAAB website at http://www.naab.org.

## **INSTRUCTIONAL METHODOLOGY:**

Drawing/Research Projects: Drawing assignments intended to explore ways of understanding class material will be assigned to be done in class as well as outside of class.

Readings and Discussion: Reading assignments are outlined in the course schedule. All students are expected have completed the readings prior to the class meeting and to actively participate in discussions. Each discussion session will be lead by a member of the class.

*Lectures:* Lectures complementing the specific topic under consideration will be given weekly. These may be augmented by slides and handouts and correspond to the assigned readings.

Written Assignments: A series of written assignments will be given to measure understanding of ideas, development of skills, and so forth.

# EVALUATION and GRADING:

All work must be complete and submitted on time – no late work will be accepted.

As per the Department of Architecture and University of Memphis standards, graduate students must maintain an overall GPA of 3.0 (B). Grades of D and F will not apply toward any graduate degree, but will be computed in the GPA. No more than seven hours of C+, C, or C-will be applied towards meeting graduate degree requirements.

1. Breakdown:

Drawing Projects: 25%
Examinations and Exercises: 50%
Attendance and Participation: 25%
100%

2. Grading Scale: The University plus/minus grading scale will be utilized in this course. The overall grading scale is as follows:

Α+ 98 - 100% Α 94 - 97% 90 - 93% A-B+ 87 - 89% 84 - 86% 80 - 83% B-77 - 79% C+ 74 - 76% С C-70 - 73% D+ 65 - 69% D 0 - 64% F 60 - below

TEXTBOOKS:

Readings from a variety of sources will be assigned.

NOTE: Textbooks from previous Architecture Program will be used periodically and must be in the studio.

ATTACHMENTS: Architect

Architecture Rules of Conduct, Architecture Attendance & Participation Policy

**SEPARATE COVER:** Schedule, Assignments

II Seminar
l Design
Architectural
- Advanced
ARCH 7012 -

1000			+
Week	Date	Keading	Lecture/Discussion Lopic
			Introduction
2 N			MLK Day
2	W 19-Jan		Drawing Event
	T 20-Jan	"Urban Design and People" by Dobbins (e-courseware)	Discussion Topic - Who Designs the City?
3 N	M 24-Jan		Lecture - Visions of Utopia
>		"The Machine in the Garden" by Leo Marx (e-courseware)	Drawing Event
F	T 27-Jan	"Dreams of Utopia" from The Ethical Function of Architecture by Karsten Harries (e-reserve)	Discussion Topic - Conflicting Notions of "God's Country"
4	M 31-Jan		Lecture - Urban Phenomenology I
>			Drawing Event
F	T 3-Feb	Representation and Re-Presentation" from The Ethical Function of Architecture by Karsten Harries (e-reserve)	Discussion
5 /	M 7-Feb		Lecture - Urban Phenomenology II
<i>&gt;</i>			Drawing Event
_	T 10-Feb	"Image of the City" by Lynch (e-courseware)	Discussion
9 9	M 14-Feb		Lecture - Urban Phenomenology III
>	W 16-Feb	16-Feb "The Language of Architecture" by Donougho (e-courseware)	Drawing Event
	T 17-Feb	"The Semiotics of Architecture" by Eco (e-courseware)	Discussion
7 N	M 21-Feb		Lecture - New Urbanism
۷	W 23-Feb	I	Drawing Event
_	r 24-Fek	24-Feb Excerpts from "A Pattern Language" by Alexander (e-reserve)	Discussion
N 8	M 28-Feb		Lecture - New Urbanism's Detractors
۷	W 2-Mar	"The Ideal of Community and Its Counterfeit Construction" by Clark (e-courseware)	Drawing Event
	T 3-Mai	3-Mar  "The New Urbanism: Critiques and Rebuttals" by Ellis (e-courseware)	Mid Term Due
V 6	M 7-Mar		
2	W 9-Mar		
	T 10-Mar	Spring Break	
10 N	M 14-Mar		Lecture - Building for the New Age
>	W 16-Mar	"Manifesto of Futurist Architecture" by Sant' Elia from Rethinking Technology (e-book)	Drawing Event - Working Sections
_	T 17-Mar	"Engineers and Architect's Aesthetic" by Corbusier from Rethinking Technology (e-book)	Discussion
11 N	M 21-Mar	"Construction. Industry. Architecture." by Giedion from Rethinkina Technoloay (e-book)	Lecture - Architecture and Production (preassembly)
1	W 23-Mar	"Architecture: The Expression of the Materials and Methods of Our Times" by Corbusier from Rethinking Technology (e-	Drawing Event - Working Sections
_	т 24-Ма	24-Mar   <i>book</i>	Discussion
12 N	M 28-Mar		Lecture - Design and Behavior
1	W 30-Mar		Drawing Event - Working Sections
	T 31-Mar	' "Survival Through Design" by Richard Neutra from Rethinking Technology (e-book)	Discussion
13 N	M 4-Apr		Lecture - Emergence as Form Generator
1	W 6-Apr	"Functionalism and Technology" by Reyner Banham from Rethinking Technology (e-book)	Drawing Event - Working Sections
L	T 7-Apr	"Organics" by Katavolos from Rethinking Technology (e-book)	Discussion
14 N	M 11-Apr		Lecture - Materiality
,	W 13-Apr		Drawing Event - Working Sections
_	т 14-Арі	14-Apr  "Introduction" to Surface Architecture by Letherbarrow andMostafavi (e-book)	Discussion
15 N	M 18-Apr	_"E-Bodies, E-Buildings, E-Cities" by Mitchell from Rethinking Technology (e-book)	Lecture - What the Future Holds
,	W 20-Apr	"space of Flows, Space of Places" byCastells from Rethinking Technology (e-book)	Drawing Event - Drawing Like Hugh Ferris
_	T 21-Apr	r "A Theory of Ecological Design" by Yeang from Rethinking Technology (e-book)	Discussion
16 N			
2	W 27-Apr		Final Paper Due

# ADV. ARCHITECTURAL DESIGN II

University of Memphis

Department of Architecture

Fall 2010

#### MID TERM EXAM

Assigned February 7<sup>th</sup>, 2011 Due March 3<sup>rd</sup> at 1:00pm

**Instructions:** Please answer **three (3) of the five (5)** questions. Construct your answers from verifiable and fully referenced facts. Do not polemicize or make general unsupported statements, but meaningfully reference the readings, lectures and discussions in class, as well as other readings from outside of class. As with all academic papers do not speak in the first person, but discuss the issues. Do not use the words "I," "like," "pleasing," or "nice."

**Format:** Your paper can use as many pages as is necessary to fully answer the questions. Including diagrams and/or well chosen photographs in the text is encouraged. Proofreading and proper footnoting is required.

#### **Questions:**

- 1) In our readings, Dobbins alluded to a connection between the form of the city and the culture that generated that form. Yet the complex nature of cities seems to make classification difficult. What is the connection between city form and culture? How can this connection inform your designs?
- 2) Many urban thinkers have suggested through writing and design, ways to rethink the city in reaction to the policies and thinking prevalent in their time. The utopian visions discussed in class including "New Urbanism" and/or "traditionalism" stem from the same place in our culture. Citing examples, discuss what the cultural purpose for such thinking might be and how effective it is or has been?
- 3) In recent years there has been a great deal of innovation in the process by which buildings are designed and constructed. Much of this innovation has been fueled, among other things, by the computer. New programs have allowed for form and construction details unheard of in previous eras. Much of the work of Gehry would fit this description. Many have said that this is the beginning of a rethinking of how we develop form and what is the appropriate language for the built environment? What is the appropriate language for our buildings and by extension our cities at this time?
- 4) Rachel McCann in her article "The Hither Side of Depth" expressed a concern that our culture is becoming increasingly detached from the direct experience in the physical environment. Do you see this as a problem? Is it a problem for designers? How can our designs address the full senses of the occupants?
- 5) In urban design much effort is invested into the making of "place" and its relationship to the city at different scales. What do you believe is meant by "place-making" and how can this effect future practice?

Make good use of your time. There will be no late entries accepted.

<sup>&</sup>lt;sup>i</sup> Rachel McCann, "The Hither Side of Depth, and Architectural Pedagogy of Engagement," Writings in Architectural Education (Copenhagen: EAAE, 2005).

# ADV. ARCH. DESIGN SEMINAR II

University of Memphis

Department of Architecture

Spring 2011

#### **FINAL EXAM**

Assigned March 28, 2011

Due Final exam time/date

**Instructions:** Please answer **three (3) of the six (6)** questions. Construct your answers from verifiable and fully referenced facts. Do not polemicize, but make meaningful reference to the readings, lectures and discussions in class, as well as other readings from outside of class. As with all academic papers do not speak in the first person, but discuss the issues. Do not use the words "I," "like," "pleasing," or "nice."

**Format:** Your paper can use as many pages as is necessary to fully answer the questions. Including diagrams and/or well chosen photographs in the text is encouraged, but be sure to make direct reference to any graphic content you have in the text. Proofreading and proper footnoting is required. Professionalism is expected.

#### Questions:

- 1) In class we have read and heard lectures about several utopian visions of city form. Each took a stand about what constitutes "community" and how the effects of industrialization can be dealt with. While each utopian vision had an impact, none were fully realized. What is the role, if any, of the visionary thinker, and by extension the designer, in the formation of urban theories and paradigms.
- 2) Corbusier, in his essay "The Expression of Materials and Methods," seems to describe true architecture as expressing the state of mind of an epoch. What did the author mean by this? Does contemporary practice produce architecture that expresses our time? How? If not, what should architecture be doing?
- 3) In recent years there has been a great deal of innovation in the process by which buildings are designed and constructed. Much of this innovation has been fueled, among other things, by the ability to use new technology such as industrial prefabrication and direct to the fabricator designs. This seems to place technology as a very important driving force in design. What is the proper place of technology in design?
- 4) Recent architectural theories have explored the notions of emergence and bio-mimicry as a way to drive the design process. In some ways this flies in the face of modernist rationalism. Is this a legitimate thread of contemporary design practice? Why or why not?
- 5) As we have been seeing in AES class (for some of you) and studio this semester, sustainability can have varying impacts on the form of a building: from specifying recycled or renewable materials only, to allowing sustainability to be expressed in the form and function of the building. What is the place of sustainability in the larger world of practice? How should our designs, if at all, take a position about sustainability?
- 6) As we have been seeing in studio this semester, working with existing structures and integrating them with contemporary materials/methods can have varying impacts on the form of a building. What is the place of preservation and adaptive reuse in the larger world of practice? How should our designs, if at all, take a position about the already built world?

Make good use of your time. There will be no late entries accepted.

# ARCH 7711- ADVANCED ARCHITECTURAL DESIGN STUDIO I

Department of Architecture • College of Communication & Fine Arts • University of Memphis

# **COURSE SYLLABUS**

Fall 2011

Issue date: Aug. 29, 2010 (subject to revision)

Studio 2:00pm – 5:00pm Mon-Wed-Thurs Room JO 303

Instructor: Prof. James Williamson

Office: JO 406

Office Hours: please see schedule on office door

Telephone: (901) 678.5669 (office) E-mail: jfwllmsn@memphis.edu

**CATALOG: 7711. Advanced Architectural Design Studio I (6).** Advanced studio problems in architecture; changing topics address a variety of critical and ideological constructs; emphasizes life-safety, building envelope and service systems, materials and assemblies. COREQUISITE: ARCH 7011.

## **EDUCATIONAL OBJECTIVES:**

- To explore design issues and techniques including their integration with concepts of life-safety, building envelope and service systems, and materials and assemblies. (Life safety issues focus on egress. Building envelope systems include the application and performance of materials and assemblies. Service systems include plumbing, electrical, vertical transportation, communication, security, and fire protection systems. Building materials and assemblies include construction materials, products, components, and assemblies, including their environmental impact and reuse.)
- 2. To further develop skills in speaking, writing, graphics, and critical thinking
- 3. To explore the impact of diverse human needs, abilities, social patterns, and behavior on design

**NAAB CRITERIA:** This course addresses the following NAAB Student Performance Criteria: A1 Speaking and Writing Skills, A2 Design Thinking Skills, A5 Investigative Skills, A6 Fundamental Design Skills, A7 Use of Precedents, B4 Site Design, B5 Life Safety, B9 Structural Systems, B10 Building Envelope Systems, B11 Building Service Systems, B12 Building Materials & Assembly. Students should consult the NAAB website (www.naab.org) for detailed information.

**ORGANIZATION:** The course will be organized around two separate design projects, focusing on the theme of "City Building" at different scales. In addition to general design issues, design will focus on issues of life-safety, building envelope and service systems, and materials and assemblies as studied concurrently in the Arch 7011- Advanced Architectural Design Seminar. Assignments will also require site investigation, precedent research, and verbal and graphic presentations. The presentation format will include graphics, models and oral/written narratives. More information for each project will be provided in separate handouts.

**POLICIES:** The current version of Department of Architecture Policies and Procedures, attached by reference, will be enforced in this class. The following supplement these Policies:

Syllabus: ARCH 7711 Page 1

- A high degree of commitment and a commensurate expenditure of time and effort are expected in the design studio. Individual critiques will normally be offered by the Instructor during each studio session, and it is expected that work will show evidence of significant advancement since the previous session. Students are to be prepared to present their work at the beginning of every studio session.
- 2. Students are urged to work in the studio (or on-site or in the shop as appropriate), and to keep current design studies posted on the display space provided. At the Instructor's discretion, work performed substantially outside the studio may not be accepted and/or will be penalized.
- 3. Verbal descriptions are not an acceptable substitute for work presented in the form of drawings or models, and will not be critiqued. Computer drawings must be plotted prior to the start of the studio session, and except in special circumstances, will not be critiqued on the computer screen.
- 4. In order to help prevent the spread of colds and flu, students who are suffering from flulike symptoms are asked <u>not</u> to come to class until they have recovered. Please notify Prof. Williamson by e-mail.
- 5. Cellular telephones and paging devices must be turned off during class.
- 6. Food is not to be consumed during class (beverages are permissible).
- 7. Each assignment must be submitted in its original form and will be retained by the Department of Architecture. All projects are to be photographed and a CD of images of each project submitted at the end of the term for retention by the Department. In addition, at the end of the semester a Studio Book will be compiled by students featuring the work for the term. A standard template will be issued to each student for use in compiling the Studio Book.
- 8. Reasonable and appropriate accommodations will be provided to students with disabilities who present a memo from Student Disability Services (SDS). Students who request disability accommodations without a memo will be referred to SDS
- 9. Except as otherwise approved in advance by the instructor, guests are not permitted to attend studio or jury sessions. Invitations to Jurors are to be issued by the Instructor, only.
- 10. All assignments must be completed on time. At the Instructor's discretion, late work will not be accepted and/or will be penalized.
- 11. Substantially incomplete projects, as determined by the Instructor, will not be eligible for presentation to the jury.

**EVALUATION and GRADING:** Grading standards for graduate students assume a higher level of effort and accomplishment than at the undergraduate level. Students are expected to assume responsibility for monitoring their own progress in this course. At or near mid-semester, each student will be expected to arrange an informal private meeting with Prof. Williamson to review performance and identify any areas that require special attention. The meeting should be scheduled during regular office hours and should be arranged approximately a week in advance. Students should bring a list of any questions or special concerns, and should record minutes of the discussion. (Additional meetings may also be arranged for special concerns as needed.)

As per the Department of Architecture and University of Memphis standards, graduate students must maintain an overall 3.0 GPA (B). Grades of D and F will not apply toward any graduate

Syllabus: ARCH 7711 Page 2

degree, but will be computed in the GPA. No more than seven hours of C+, C, or C- will be applied towards meeting graduate degree requirements.

The breakdown of components of the final grade is as follows.

Design project 1: 20% Design project 2: 70% Participation: 10%

The Participation component of grades includes attendance, teamwork, group discussions, motivation, and professionalism.

Grading Scale: The University plus/minus grading scale will be utilized in this course. The overall grading scale is as follows:

Α	Exemplary 90 - 100%	(4.1- 5.0 points)
В	Accomplished 80 - 89%	(3.1- 4.0 points)
С	Average 70 - 79%	(2.1-3.0 points)
D	Poor 60 - 69%	(1.1-2.0 points)
F	Unsatisfactory 59 - below	(0- 1.0 points)

At various points during the project, evaluations in the form of oral critiques will be provided by the class as a whole by the Instructor and by invited Jurors. While final grades will be assigned by the Instructor, jury comments will also be taken into consideration. Jurors will be asked to rate each project on the following criteria: presentation, design concept and theoretical basis, creativity, design appropriateness, and technical integration. A sample copy of the Juror Evaluation form is attached.

**RELEASE FORMS:** The Department of Architecture Release / Hold-Harmless Agreement must be completed and signed by each student before taking any off-campus trips, including trips within Memphis. The Medication Release Form must be completed for any out-of-town trips. Students must print and complete the forms during the first week of classes and submit them to the instructor. These forms may be found at http://architecture.memphis.edu/TravelRelease.pdf.

**SUPPLIES and MATERIALS:** Each student is responsible for providing all supplies and materials required for assignments. A 12" roll of tracing paper should be kept in the studio for periodic use by the Instructor during desk critiques.

#### **ATTACHMENTS:**

Sample Juror Evaluation Form

Department of Architecture Policies attached by reference:

http://architecture.memphis.edu/ormanfa09.pdf

**Shop Policies** 

Release forms attached by reference: http://architecture.memphis.edu/TravelRelease.pdf

Syllabus: ARCH 7711 Page 3

Fall 2011

O Institute	PEMADEC	PRINCIPAL	Field trip to St. Columba Retreat Center   bring camera, sketchbook, compass, site plan and aerial photo				Group critiques	Group critiques	Group critiques	Present preferred concept alternative   Pin-up all concept sketches (including rejected alternatives)	Desk crits	Desk crits	Pin-up sketch sile plan, floor plans, sections		Desk crits		Desk crits	Desk crits	pin-up studies of site plan, floor plans, sections, elevations, sketch perspectives, and preliminary life safety, structural, and mechanical plans; study model.
PROJECT No. 2, A Conference Center for the CREDO Institute	ASSIGNMENT	Project assigned; client meeting; begin research	Field trip to St. Columba Retreat Center	Research and documentation	Research and documentation	Presentation of Research findings	Begin development of concept alternatives	Develop concept alternatives	Develop concept alternatives	Present preferred concept alternative	Develop selected concept	Develop selected concept	Present selected concept	Fall break; no class	Design studies, including sustainable, structural, & mechanical concepts	Present sustainable, structural, & mechanical concepts	Design studies, including sustainable, structural, & mechanical concepts	Design studies, including sustainable, structural, & mechanical concepts	"Mid-Cril" presentation
CLASS SCHEDULE: PROJECT No. 2	Revised Oct. 3, 2011	Monday, September 19, 2011	Wednesday, September 21, 2011	Thursday, September 22, 2011	Monday, September 26, 2011	Wednesday, September 28, 2011	Thursday, September 29, 2011	Monday, October 03, 2011	Wednesday, October 05, 2011	Thursday, October 06, 2011	Monday, October 10, 2011	Wednesday, October 12, 2011	Thursday, October 13, 2011	Monday, October 17, 2011	Wednesday, October 19, 2011	Thursday, October 20, 2011	Monday, October 24, 2011	Wednesday, October 26, 2011	Thursday, October 27, 2011
	38412	- -	2	м	4	5	9	7	∞	6	10	11	12		13	41	15	16	17

18	11	Develop Design	Desk crits
19	Wednesday, November 02, 2011	Develop Design	Desk crits
20	Thursday, November 03, 2011	Present life-safety concepts	color-coded life-safety diagrams of each floor overlaid on architectural floor plans
21	Monday, November 07, 2011	Develop Design	Desk crits
22	Wednesday, November 09, 2011	Develop Design	Desk crits
23	Thursday, November 10, 2011	Present structural & building envelope concepts	structural framing diagrams overlaid on architectural floor plans, indicating all columns, beams, floor slabs, load-bearing walls, etc.; building envelope concept
24	Monday, November 14, 2011	Develop Design	Desk crits
25	Wednesday, November 16, 2011	Develop Design	Desk crits
26	Thursday, November 17, 2011	Present mechanical concepts	color-coded HVAC diagrams of each floor overlaid on architectural floor plans and indicating supply and return air distribution system, including direction of air flow, location of supply diffusers and return registers, mechanical equipment room(s), vertical risers, etc.
27		Develop Design	Desk crits
28	Wednesday, November 23, 2011	Finalize Design	Desk crits
29	Thursday, November 24, 2011	Thanksgiving; no class	
30	Monday, November 28, 2011	Finalize Design	Desk crits
31	<b>1</b>	Begin final presentation	Desk crits
32	Thursday, December 01, 2011	Develop presentation	Desk crits
33	11	Develop presentation	Desk crits
34	Wednesday, December 07, 2011	Develop presentation	Desk crits (last regular class)

# The Architecture of Louis I. Kahn

**COURSE SYLLABUS** 

ARCH 7011 – Advanced Architectural Design Seminar I

Dept. of Architecture College of Communication & Fine Arts University of Memphis

**Fall 2011** (issue date Aug. 29, 2011; subject to revision) 1:00 – 1:55 p.m., Mon., Wed. and Thurs. Room JO 402

**Instructor:** Prof. James Williamson

Office: JO 406

Office Hours: please see schedule on office door

Telephone: (901) 678.5669 (office) E-mail: jfwllmsn@memphis.edu

**CATALOG: 7011.** Advanced Architectural Design Seminar I. (3). Offered in conjunction with advanced studio problems in architecture; changing topics address a variety of critical and ideological constructs; emphasizes life-safety, building envelope and service systems, materials and assemblies. COREQUISITE: ARCH 7711.

**INTRODUCTION:** Louis Kahn has been described as "the most important American architect since Frank Lloyd Wright and perhaps the most significant to have emerged internationally since World War II." An understanding of Kahn's theories as manifested in his projects, both built and unbuilt, his lectures, and his writing is valuable for all architects. This seminar will explore Kahn's work in depth through readings, discussions, and illustrated presentations.

# **EDUCATIONAL OBJECTIVES:**

- 1. To explore key theories and issues of contemporary architectural design as revealed in the work of Louis I. Kahn.
- 2. To understand how life-safety, building envelope and service systems, materials and assemblies are integrated with design. (Life safety issues focus on egress. Building envelope systems include the application and performance of materials and assemblies. Service systems include plumbing, electrical, vertical transportation, communication, security, and fire protection systems. Building materials and assemblies include construction materials, products, components, and assemblies, including their environmental impact and reuse.)
- 3. To further develop techniques of effective research, oral presentation, critical thinking, and analysis relative to architectural works.
- 5. To support and inform work in the Advanced Architectural Design Studio I (ARCH 7711) taught concurrently.

NAAB CRITERIA: This course addresses the National Architectural Accrediting Board (NAAB) (http://www.naab.org/) Student Performance criteria in the following categories: A1 – Speaking and Writing Skills, A2 – Design Thinking Skills, A5 – Investigative Skills, B5 - Life Safety, B10 – Building Envelope Systems, B11 – Building Service Systems, B12 – Building Materials & Assembly

**INSTRUCTIONAL METHODOLOGY:** The class format will be built around group discussions of reading assignments and illustrated student presentations focusing on the design of the major

works by Louis Kahn. Emphasis is to be placed on Kahn's philosophy, how his theories inform his built and unbuilt projects, and how life-safety, building envelope and service systems, materials and assemblies are integrated with design.

**REQUIREMENTS:** Each student will be expected to complete each reading assignment in advance, and be prepared to make thoughtful contributions to the class discussions. Each student will also research, prepare, and lead several illustrated case study discussion/presentations of a significant project by Kahn. Early in the semester each member of the class will be assigned topics and presentation dates from the Class Schedule. Students should consult with Prof. Williamson well in advance as necessary for assistance in planning presentations. In addition, a Final Paper is required as described below.

**Case study presentations** will consist of a Powerpoint and class discussion led by the student, not to exceed 55-minutes. The presentation should consist of a thorough explanation of the design, an analysis of how Kahn's design philosophy is revealed in the assigned building, as well as a discussion of pertinent parts of the reading assignment. Effective presentations will include:

- Written agenda handout outlining major points to be covered, distributed at the beginning of the class.
- Powerpoint presentation of the project, including the client, program, site, and design.
   Presentation of the design should include the integration of life-safety, building envelope
   systems, service systems, and materials and assemblies. (While not every project will lend
   itself to a discussion of all of these issues, each presentation should stress how the design
   concept integrates one or more of these concerns.)
- Discussion of the reading assignment to the extent it relates to the project under consideration. As leader of the discussion it will be your job to encourage participation by all members of the class, including asking provocative questions to provoke critical thinking and dialogue, keeping the discussion on topic, and closing with a brief summary of major points covered.
- Limiting the presentation and discussion to the time available (55 minutes.) It is suggested that the time be allotted as follows:
  - o Presentation of project: 35 minutes
  - o Discussion of reading assignment: 15 minutes
  - o Summary: 5 minutes

Presentations are to be carefully planned and <u>rehearsed</u> in advance, so as to flow smoothly and allow adequate time for both the illustrated presentation and full discussion without running past the end of the class period. For Powerpoint presentations, images can often be copied from the Internet. Where necessary, students should scan other images from books and periodicals using departmental equipment. (Perseverance and resourcefulness may be required in some cases! Inability to locate images or information on the Internet will <u>not</u> be considered a valid reason for their omission.) The presenter is responsible for setting up the projector in the classroom at least 15 minutes prior to the start of class so that the presentation can begin on time. Following class, the projector is to be returned to the Library, where it must be left <u>plugged in</u>, <u>with the remote</u> control in the recharging cradle.

**Final Paper.** This essay will challenge you to synthesize, in a critical way, the ideas discussed during the semester. The paper should address the extent, if any, to which you feel Kahn's ideas are relevant for you and your future career. The essay is to be a careful personal reflection, not a research paper, and the ideas expressed in it are to be primarily your own, although it may be appropriate to refer to ideas of others. Included in your paper might be your response to the following questions.

- Are there any principles, values, or ways of thinking inspired by Kahn that hold special promise for you as a designer? Why or why not?
- To what extent, if any, do you disagree with Kahn's theories?
- It has now been almost 40 years since Kahn's death. How have his buildings and ideas stood the test of time with respect to their validity for you as a young architect?
- Which buildings of Kahn's, if any, do you feel strongly about, either positively or negatively, as a potential influence on your own work? Why?

Your paper should exhibit critical thinking worthy of a graduate student. Critical, of course, does not mean insulting; rather it means, "characterized by careful, exact evaluation and judgment," and may be either positive or negative. A critic is "one who forms and expresses judgments of the merits, faults, value or truth of a matter."

The following requirements apply to the length, format, and style your paper:

- Length: 4,000 5,000 words
- Format: 12-point type, double-spaced, bound, paper size 8-1/2" x 11"
- Cover page including paper title, your name, date, and "ARCH 7011 Advanced Architectural Design Seminar"
- Style: Grammar, usage, punctuation, footnotes, etc. are to conform to the Chicago Manual of Style.
- Any ideas by others must be acknowledged, whether directly quoted or paraphrased.
   Quotations must be italicized or enclosed in quotation marks. Failure to acknowledge sources will be considered plagiarism, which is an honor code offense.
- This paper is to be your own work. At the end of your paper is to be included the following statement, <u>followed by your signature</u>: "On my honor, I have neither given nor received unacknowledged assistance on this assignment."

The completed paper is due no later than 1:00 pm, Fri., Dec. 9, 2011.

**POLICIES:** The current version of Department of Architecture Policies and Procedures, attached by reference, apply to this class. The following requirements supplement these Policies:

- 1. In order to help prevent the spread of colds and flu, students who are suffering from flu-like symptoms are asked <u>not</u> to come to class until they have recovered. Please notify Prof. Williamson by e-mail.
- 2. Food is not to be consumed during class (coffee, tea, and soft drinks are permissible).
- 3. A CD and hard copy of each student class presentation are to be submitted at the end of the term for retention by the Department.
- 4. Reasonable and appropriate accommodations will be provided to students with disabilities who present a memo from Student Disability Services (SDS). Students who request disability accommodations without a memo will be referred to SDS.

**EVALUATION and GRADING**: Grading standards for graduate students require a higher level of effort and accomplishment than at the undergraduate level. Students are expected to assume responsibility for monitoring their own progress in this course. At or near mid-semester, each student will be expected to arrange an informal private meeting with the Instructor to review performance and identify any areas that require special attention. The meeting should be scheduled during regular office hours and should be arranged approximately a week in advance. Students should bring a list of any questions or special concerns, and should record

minutes of the discussion. (Additional meetings may also be arranged for special concerns as needed.)

Grading for graduate students demands a higher standard of effort and accomplishment than at the undergraduate level. Final grades will be assigned by the Instructor based on the following.

- 1. Class Presentations: each weighted equally, totaling 40% of final grade. In general, each will be graded on the extent to which the requirements outlined above are met, extent of research and preparation, organization, presentation skills, leadership of discussion, ability to relate content to the educational objectives of the course, and detailed knowledge of the subject matter. Grades on individual assignments will be assigned using the attached Presentation Evaluation form, which includes specific grading criteria and numerical grading scale. Evaluations will normally be e-mailed to students within a week following completion of each presentation.
- 2. Final Paper: 40% final grade.
- 3. Participation: 20% final grade. The Participation component of grades includes attendance, group discussions, motivation, and professionalism.

Grading Scale: The University plus/minus grading scale, will be utilized. The overall grading scale is as follows:

Α	Exemplary	90 - 100%	(4.1-5.0 points)
В	Accomplished	180 - 89%	(3.1- 4.0 points)
С	Average	70 - 79%	(2.1-3.0 points)
D	Poor	60 - 69%	(1.1-2.0 points)
F	Unsatisfactory	59 - below	(0- 1.0 points)

As per the Department of Architecture and University of Memphis standards, graduate students must maintain an overall 3.0 GPA (B). Grades of D and F will not apply toward any graduate degree, but will be computed in the GPA. No more than seven hours of C+, C, or C- will be applied towards meeting graduate degree requirements.

Only extenuating circumstances beyond the control of the student (e.g. serious accident or illness, death in immediate family, etc.) are considered a valid reason for missing class or requesting an extension of a deadline. It is essential that presentations to the class be made as scheduled and except for emergencies, missed presentations not excused by the instructor at least 48 hours in advance may result in a failing grade or may be otherwise penalized at the instructor's discretion. Extensions due to extenuating circumstances may be allowed at the discretion of the instructor.

**REQUIRED TEXTS:** it is recommended that students immediately purchase a copy of each of the following, which should be available at the University Bookstore and Amazon.com. One copy of each text will also been placed on 2-hour reserve in the Reserve Room, 1st floor of the McWherter Library. Reserve texts are not to be removed from the library.

1. <u>Louis I. Kahn: In the Realm of Architecture</u> David B. Brownlee and David G. De Long Rizzoli, New York, 1991 (paperback) ISBN 0847813304

# 2. Louis I. Kahn: Unbuilt Masterworks

Kent Larson The Monacelli Press, New York, 2000 ISBN 158093014X

## 3. Louis Kahn, Essential Texts

Robert Twombly, ed. W.W. Norton & Co., New York, 2003 ISBN 0393731138 (paperback)

# 4. Louis I. Kahn: Conversations with Students

Architecture at Rice 26
Second Edition, Princeton Architectural Press, 1998
ISBN 156898149X (paperback)

# 5. Louis I. Kahn

Vincent Scully Jr.,
Makers of Contemporary Architecture series
George Braziller, 1962 (paperback)

**OTHER TEXTS:** In addition to the required texts, assignments may be made from handouts distributed in class, from scanned texts distributed by email, or from books placed on 2-hour reserve in the Reserve Room of the McWherter Library.

## **ATTACHMENTS:**

Class Schedule
Sample Presentation Evaluation Form
Department of Architecture Policies attached by reference:
<a href="http://architecture.memphis.edu/ormanfa09.pdf">http://architecture.memphis.edu/ormanfa09.pdf</a>

FALL 2011

CLASS	DATE	LEADER	TOPIC	ADVANCE READING
-	Monday, August 29, 2011	Williamson	Introduction & Course Overview	none
2	Wednesday, August 31, 2011	Williamson	Film:"My Architect"	Scully, pp. 9-26
3	Thursday, September 01, 2011	Williamson	Kahn in Context I	Scully, pp. 27- 44
	Monday, September 05, 2011	Labor Day; no Class		
4	Wednesday, September 07, 2011	Williamson	Kahn in Context II	Brownlee & De Long, pp. 12-17; Twombley, pp. 9-19 (see page nos. at <u>top</u> of page)
2	Thursday, September 08, 2011	Williamson	Adventures of Unexplored Places	Brownlee & De Long: pp. 36- 49
9	Monday, September 12, 2011	Williamson	Talk at the Conclusion of the Otterlo Congress, 1959	Twombley, pp. 37-61
7	Wednesday, September 14, 2011	Williamson	Form and Design	Scully pp. 114-121
8	Thursday, September 15, 2011	Williamson	Order	Scully, pp.113-114
6	Monday, September 19, 2011	Student 1	Yale Art Gallery, 1953	Brownlee & De Long: pp. 50- 64
10	Wednesday, September 21, 2011	Student 2	Bath House, Jewish Community Center, Trenton, NJ, 1959	Brownlee & De Long; pp. 65-77
11	Thursday, September 22, 2011	Williamson	Monumentality, 1944	Twombley, pp.21-31
12	Monday, September 26, 2011	Student 3	U.S. Consulate, Luanda, Angola, 1959-1962 (unbuilt)	Larson, pp. 19-47
13	Wednesday, September 28, 2011	Student 4	1st Unitarian Church & School, 1969	See email for link to Internet article
14	Thursday, September 29, 2011	Williamson	Discussion in Kahn's Office, 1961	Twombley, pp. 97-118
15	Monday, October 03, 2011	Student 5	Franklin D. Roosevelt Memorial, 1960 (unbuilt)	See email for link to Internet article
16	Wednesday, October 05, 2011	Student 1	Richards Medical Laboratory, 1965	See email for link to Internet article
17	Thursday, October 06, 2011	Williamson	The Nature of Nature, 1961	Twombley, pp. 119-122
18	Monday, October 10, 2011	Student 2	Capital of Bangladesh, Dhaka, 1983	Brownlee & De Long: Chapter 3, pp. 78-91
61	Wednesday, October 12, 2011	Student 3	Salk Institute for Biological Studies, Master plan & Laboratories, 1965	Brownlee & De Long: Chapter 4, pp. 94-110
20	Thursday, October 13, 2011	Williamson	Lecture at a Conference on 'Medicine in the Year 2000', 1964	Twombley, pp. 169-184
	Monday, October 17, 2011	Fall break; no class		

21	Wednesday, October 19, 2011	Student 4	Salk Institute for Biological Studies, Meeting Houses, 1965 (unbuilt)	Larson, pp. 48-77
22	Thursday, October 20, 2011	Williamson	Lecture at International Design Conference, Aspen, CO, 1962	Twombley, pp. 151-161
23	Monday, October 24, 2011	Student 5	Erdman Hall, Bryn Mawr College, 1965	Twombley, "Law and Rule in Architecture," pp. 123-150
24	Wednesday, October 26, 2011	Student 1	Hurva Synagogue, first proposal, 1968 (unbuilt)	Larson, pp.124-157
25	Thursday, October 27, 2011	Williamson	Lecture to the Boston Society of Architects, 1966	Iwombley, pp. 197-219
26	Monday, October 31, 2011	Student 2	Indian Institute of Management, 1974	See email for link to Internet article
27	Wednesday, November 02, 2011	Student 3	Mikveh Israel Synagogue, 1972 (unbuilt)	Larson, pp. 78-109
28	Thursday, November 03, 2011	Williamson	Space and the Inspirations, 1967	Iwombley, pp. 220-227
29	Monday, November 07, 2011	Student 4	Kansas City Office Building, 1966-73 (unbuilt)	August Komendant, 18 Years with Architect Louis I. Kahn, pp 133-159 (library reserve)
30	Wednesday, November 09, 2011	Student 5	Performing Arts Center, Fort Wayne, IN, 1973	Brownlee & De Long; Chapter 5, pp. 112-123; Iwombley, "Lecture at Yale University," pp. 162-168
31	Thursday, November 10, 2011	Williamson	White Light Black Shadow, 1968	Louis I. Kahn; Conversations with Students, pp. 12-33
32	Monday, November 14, 2011	Student 1	Phillips Exeter Academy Library & Dining Hall, 1972	Brownlee & De Long: Chapter 6, pp. 126-141; Ada Louise Huxtable, "Louis Kahn: Exeter Library" (handout)
33	Wednesday, November 16, 2011	Student 2	Kimbell Art Museum, 1972	Twombley, pp. 228-251
34	Thursday, November 17, 2011	Williamson	Design is Form Towards Presence, 1968	Louis I. Kahn: Conversations with Students, pp. 35-66
35	Monday, November 21, 2011	Student 3	Palazzo dei Congressi, 1968-74 (unbuilt)	Larson, pp. 78-109
36	Wednesday, November 23, 2011	Student 4	Yale Center for British Art, 1974	Jules Prown, "The Architecture of the Yale Center for British Art" (handout)
	Thursday, November 24, 2011	Thanksgiving; no class		
37	Monday, November 28, 2011	Student 5	The New Art of Urban Design: Are We Equipped? 1960	Twombley, pp. 75-96
38	Wednesday, November 30, 2011	Williamson	Kahn as Poet-Philosopher and Architect- Teacher	August Komendant, <u>18 Years with Architect Louis I.</u> <u>Kahn</u> , pp 161-190 (library reserve)
39	Thursday, December 01, 2011	Williamson	Lecture at Tulane University School of Architecture, 1972	John William Lawrence Memorial Lecture, Tulane University School of Architecture
40	Monday, December 05, 2011	Williamson	The Room, the Street, and Human Agreement;	Twombley, pp. 252-260
41	Wednesday, December 07, 2011	Williamson	Lecture at Pratt Institute, 1973	Twombley, pp. 266-280; Robert Venturi, "Louis Kahn Remembered" (handout)

# ARCH 4516/6516— Special Topics in Architectural Practice

Department of Architecture • College of Communication & Fine Arts • University of Memphis Revised Mar. 14, 2011

#### **COURSE SYLLABUS**

Spring 2011

8:00- 9:25 a.m., Mon.-Wed., Room JO 407/409

Instructor: Prof. James Williamson

Office: JO 406

Office Hours: by appointment; see schedule on office door

Telephone: (901) 678.5669 (office) E-mail: jfwllmsn@memphis.edu

COURSE DESCRIPTION: ARCH 4516/6516 Special Topics in Architectural Practice (3). Professional practice of architecture, ethics, professional services, legal aspects of practice organization, financial management, business planning, building codes, building programming, time and project management, risk mitigation, mediation and arbitration, project delivery, diversity, and others. PREREQUISITE: ARCH 3713, ARCH 7713, or permission of instructor.

## **EDUCATIONAL OBJECTIVES:**

- 1. To understand the various dimensions of professional life, including ethics, professional conduct, and service leadership
- 2. To understand the legal dimensions of architectural practice
- 3. To understand the importance of professional development for architects, including leadership and communication skills
- 4. To understand the different modes of architectural practice, including starting a firm and running a practice
- 5. To understand effective techniques of project management and administration, including programming, building code research, defining project services, sustainable design, project delivery, construction cost management, and maintenance of design quality
- 6. To develop skills in construction documentation, including specifications
- 7. To understand the contractual relationships between the client, the architect, and the contractor, with emphasis on AIA forms of Agreement
- 8. To further develop collaborative skills, including team research and presentation techniques

Syllabus: ARCH 4516/6516 - Spring 2011 Page 1

# 9. To further develop skills in critical thinking

NAAB CRITERIA: This course addresses the following NAAB Student Performance Criteria: 1. Speaking & Writing Skills, 2. Critical Thinking Skills, 7. Collaborative Skills, 25. Construction Cost Control, 26. Technical Documentation, 27. Client Role in Architecture, 29. Architect's Administrative Roles, 30. Architectural Practice, 31. Professional Development, 32. Leadership, 33. Legal Responsibilities, and 34. Ethics & Professional Judgment. Students should consult the NAAB website (www.naab.org) for detailed information.

METHODOLOGY: The course will be organized around a series of lecture/ discussions by the Instructor and invited guests, as well as student case study presentations. Reading assignments from the textbook and handouts will supplement the class discussions. Refer to the attached Schedule for the topic and assignment for each class session.

REQUIREMENTS: Early in the semester the class will be divided into teams, with each to be organized into a "virtual firm." Each team will be expected to research and present a team response to a series of hypothetical case studies. Each case study presentation should include an outline handout including the names of team members, course name, presentation date, topic, and major points to be covered. Team presentations are to be carefully planned and rehearsed in advance, so as to flow smoothly and follow time constraints.

All students are expected to complete the reading assignment(s) prior to class and to be ready to take an active part in class discussions.

EVALUATION and GRADING: Students are expected to assume responsibility for monitoring their own progress in this course. At or near mid-semester, each student will be expected to arrange an informal private meeting with Prof. Williamson to review performance and identify any areas that require special attention. The meeting should be scheduled during regular office hours and should be arranged several days in advance. Students should bring a list of any questions or special concerns, and should record minutes of the discussion. (Additional meetings may also be arranged for special concerns as needed.) Final grades will be assigned by the Instructor based on the following.

# Undergraduate Grading:

1. Case Studies and Daily Quizzes: each weighted equally, totaling 35% of final grade.

Each case study will be graded on the extent of research and preparation, presentation quality, and knowledge of the subject matter. Grades will be assigned using the attached Presentation Evaluation form. For case studies, field trips, and other team assignments, all members of the team will receive the same grade. Equitable division of the work of the assignment is the responsibility of the members of the team. Evaluations will normally be issued within a week following completion of each assignment.

In addition, a number of brief, unannounced Daily Quizzes will cover that day's advance reading assignment.

- 2. Mid-term Examination: 25% of final grade
- 3. Final Examination: 25% of final grade
- 4. Participation: 15% of final grade. The Participation component of grades includes attendance, teamwork, contribution to group discussions, motivation, and professionalism.

# Graduate Grading:

1. Case Studies and Daily Quizzes: each weighted equally, totaling 35% of final grade.

Each case study will be graded on the extent of research and preparation, presentation quality, and knowledge of the subject matter. Grades will be assigned using the attached Presentation Evaluation form. For case studies, field trips, and other team assignments, all members of the team will receive the same grade. Equitable division of the work of the assignment is the responsibility of the members of the team. Evaluations will normally be issued within a week following completion of each assignment.

In addition, a number of brief, unannounced Daily Quizzes will cover that day's advance reading assignment.

- 2. Mid-term Examination: 16% of final grade
- 3. Final Examination: 16% of final grade
- 4. Final Paper: 18% of final grade. Requirements for this paper will be issued separately.
- 5. Participation: 15% of final grade. The Participation component of grades includes attendance, teamwork, contribution to group discussions, motivation, and professionalism.

Grading Scale: The University plus/minus grading scale, will be utilized. The overall grading scale is as follows:

Α	Exemplary	90 - 100%	(4.1-5.0 points)
В	Accomplished	80 - 89%	(3.1- 4.0 points)
С	Average	70 - 79%	(2.1-3.0 points)
D	Poor	60 - 69%	(1.1-2.0 points)
F	Unsatisfactory	59 - below	(0- 1.0 points)

As per the Department of Architecture and University of Memphis standards, graduate students must maintain an overall 3.0 GPA (B). Grades of D and F will not apply toward any graduate degree, but will be computed in the GPA. No more than seven hours of C+, C, or C- will be applied towards meeting graduate degree requirements. Graduate students enrolled in this course must complete a final paper in addition to other class assignments.

Only extenuating circumstances beyond the control of the student (e.g. serious accident or illness, death in immediate family, etc.) are considered a valid reason for missing class or requesting an extension of a deadline. It is essential that presentations to the class be made as scheduled and except for emergencies, missed presentations not excused by the instructor at least 48 hours in advance may result in a failing grade or may be otherwise penalized at the instructor's discretion. Extensions due to extenuating circumstances may be allowed at the discretion of the instructor.

TEXTBOOK: Students should purchase a copy of the following text, available from the Department of Architecture at a reduced price:

The Architecture Student's Handbook of Professional Practice American Institute of Architects 2009 (Fourteenth Edition)

ADDITIONAL READING: Supplemental readings may be assigned, either in the form of handouts or electronic transmittal.

RELEASE FORMS: The Department of Architecture Release/Hold-Harmless Agreement must be completed and signed by each student before taking any off-campus trips, including trips within Memphis. The Medication Release Form must be completed for any out-of-town trips. These forms may be found at

http://architecture.memphis.edu/TravelRelease.pdf. Students must print and complete the forms during the first week of classes and submit them to the instructor.

POLICIES: The current version of Department of Architecture Policies and Procedures, attached by reference, will be enforced in this class. The following supplement these Policies:

- 1. Because architecture and interior design are professions regulated by state legislation and with a code of ethics governing professional conduct, similar rules and protocols are in effect in the design studios and classes as well as other education-related environments. The Honor Code of the University of Memphis Department of Architecture states: "I will not lie, cheat, or steal nor tolerate those who do." Students must also abide fully by the policies, rules, and regulations set forth in the Department of Architecture Student Policies Manual and the applicable documents of the University of Memphis. Among these are the Code of Student Rights and Responsibilities (<a href="http://saweb.memphis.edu/judicialaffairs/csc/CSRR.pdf">http://saweb.memphis.edu/judicialaffairs/csc/CSRR.pdf</a>) and the University of Memphis Code of Student Conduct Academic Dishonesty (<a href="http://saweb.memphis.edu/judicialaffairs/dishonesty/definitions.htm">http://saweb.memphis.edu/judicialaffairs/dishonesty/definitions.htm</a>).
- 2. In order to help prevent the spread of colds and flu, students who are suffering from flu-like symptoms are asked <u>not</u> to come to class until they have recovered. Please notify Prof. Williamson by e-mail.
- 3. Cellular telephones and paging devices must be turned off during class.
- 4. Food is not to be consumed during class (beverages are permissible).

- 5. Each assignment must be submitted in its original form and will be retained by the Department of Architecture.
- 6. Reasonable and appropriate accommodations will be provided to students with disabilities who present a memo from Student Disability Services (SDS). Students who request disability accommodations without a memo will be referred to SDS
- 7. Except as invited or otherwise approved in advance by the instructor, guests are not permitted to attend classes.
- 8. All assignments must be completed on time. At the Instructor's discretion, late work will not be accepted and/or will be penalized.
- 9. Attendance at all class sessions is required. The classroom door will be closed at the start of instruction. Students arriving after the start of instruction will not be admitted and will be counted as absent, as will students sleeping in class or leaving early. Excused absences will only be allowed as outlined under the Departmental Attendance Policy.

ATTACHMENTS:
Class Schedule
Department of Architecture Policies (attached by reference)
Sample Presentation Evaluation Form
Field Trip assignment
Release Forms

	DATE	TOPIC	CLASS FORMAT	ADVANCE ASSIGNMENT
-	Wednesday, January 19, 2011	Course Introduction & Overview	Introduction	None
7	Monday, January 24, 2011	Professional Life I	Professional Life	Handbook: Prof. Life, Chap. 1
က	Wednesday, January 26, 2011	Professional Life II	Film: "The Fountainhead"	Handout: "The Architect as Hero and Genius" from Saint, "The Image of the Architect"
4	Monday, January 31, 2011	Professional Life III	Case Study 1 Presentations: Ethics & Professional Conduct	TN Rules of Prof. Conduct
2	Wednesday, February 02, 2011	Legal Dimensions of Practice I	Guest Presentation: Architects and the Law	Handbook: Legal Dimensions of Practice, Chap. 2
9	Monday, February 07, 2011	Legal Dimensions of Practice II	Case Study 2 Presentations: Legal Dimensions of Practice	Case study assignment
2	Wednesday, February 09, 2011	Prof. Development I	Lecture: Leadership & Communication Skills	Handbook: Prof. Development, Chap. 3; Pressman: Chap. 7, "All About Communication" (handout)
œ	Monday, February 14, 2011	Prof. Development II	Field Trip Presentations	Review field trip assignment
6	Wednesday, February 16, 2011	Developing a Practice I	Lecture: Opening Your Own Office	Handbook: Developing a Practice, Chap. 4
10	Monday, February 21, 2011	Developing a Practice II	Case Study 3 Presentations: Designing the Virtual Firm	Case study assignment
7	Wednesday, February 23, 2011	Running a Practice I	Guest Presentation: Getting the Job	Handbook: Running a Practice, Chap. 5
12	Monday, February 28, 2011	Running a Practice II	Guest Presentation: Maintaining Financial Health	Handout: "Financial Tips for Successful Practice" from Ballast, "The Architect's Handbook"
13	Wednesday, March 02, 2011	Mid-term Exam		
	Monday, March 07, 2011 Wednesday, March 09, 2011	Spring Break		
4	Monday, March 14, 2011	Running a Practice III	Case Study 4 Presentations: Running a Practice	Case study assignment

	DATE	TOPIC	CLASS FORMAT	ADVANCE ASSIGNMENT
15	Wednesday, March 16, 2011	Project Definition & Development I	Lecture: Project Definition	Handbook: Project Definition, Chap. 6; Sects. 7.1 Sustainable Design & 7.3 Design Phases
16	Monday, March 21, 2011	Project Definition & Development II	Case Study 5 Presentations: Project Definition	Case study assignment
17	Wednesday, March 23, 2011	Project Delivery I	Lecture: Construction Documentation	Handbook: Construction Documentation, Sect. 8.3
18	Monday, March 28, 2011	Project Delivery II	Case Study 6 Presentations: Specifications	Case study assignment & other handouts
19	Wednesday, March 30, 2011	Project Delivery III	Panel Discussion: Construction Management, Design Build and Traditional Project Delivery Construction	Handbook: Project Delivery Methods, Sect. 8.1;; Handout on Project Delivery
20	20 Monday, April 04, 2011	Project Management I	Guest Presentation: Estimating Costs	Handbook: Bidding or Negotiation Phase, Sect. 8.4; 9.4 Construction Cost Management
7	Wednesday, April 06, 2011	Project Management II	Lecture: The Effective Project Manager	Handbook Sections 8.5; 9.1- 9.3; 9.5- 9.6
22	Monday, April 11, 2011	Project Management III	Case Study 7 Presentations: Project Management	Case study assignment
23	Wednesday, April 13, 2011	Building Codes & Standards I	Guest Presentation: Building Codes & Zoning	Building Codes & Regulations, Chap. 10
24	Monday, April 18, 2011	Building Codes & Standards II	Case Study 8 Presentations: Building Codes	Case study assignment
25	Wednesday, April 20, 2011	Contracts & Agreements I	Lecture: The Contract for Construction,	Handbook: Types of Agreements, Chap. 11; AIA form A107, incl. Exhibit A ( on disk in Handbook; print & bring to class.)
56	Monday, April 25, 2011	Contracts & Agreements II	Contracts & Agreements II Lecture: The Contract for Construction, Part 2	Review Owner-Contractor agreement, A107
27	27 Wednesday, April 27, 2011	Summing Up	Summary discussion & course evaluation   Handout assignment	Handout assignment

#### COURSE SYLLABUS

#### **ARCH 7421 – ADVANCED ENVIRONMENTAL SYSTEMS**

Department of Architecture 

College of Communication & Fine Arts 

University of Memphis

Spring 2011 (issue date 14 January 2011 – subject to revision)

Section 001: Studio 9:40am - 11:05am Tuesday/Thursday Room JO 301

Instructor: Michael Chisamore

Office: JO 411

Office Hours: please see schedule on office door Telephone: 901.678.4914 (office), 901.678.1755 (FAX)

E-mail: mkchsmre@memphis.edu

CATALOG:

Advanced principles, appropriate applications and performance of environmental systems; acoustical, lighting; climate modification systems and energy use integrated with the building envelope. 3 credit hours.

**PREREQUISTES:** 

ARCH 3421 (or approved equivalent) or permission of the instructor

**COREQUISITE:** 

ARCH 7012, ARCH 7712

**POLICIES:** 

- 1. The guidelines for studio conduct outlined in the Architecture Program Studio Rules shall be observed at all times.
- 2. Attendance and participation at all class sessions are required in accordance with the Department of Architecture Attendance and Participation Policy.
- 3. Cellular telephones and paging devices must be turned off during class. Exceptions may be granted in advance for special circumstances.
- 4 All students are expected to complete all assignments in a timely and professional manner.
- 5. Each assignment must be submitted in its original form and will be retained by the Department of Architecture. All projects are to be photographed and a CD of images of each project submitted at the end of the term for retention by the Department.
- 6. Posting information on-line (e-courseware) shall be considered the same as a handout.
- 7. Transmittal of information via e-mails shall be considered the same as a handout or announcement in class.
- 8. Reasonable and appropriate accommodations will be provided to students with disabilities who present a memo from Student Disability Services (SDS). Students who request disability accommodations without a memo will be referred to SDS.

9. Academic Dishonesty. Because architecture and interior design are professions regulated by state legislation and with a code of ethics governing professional conduct, similar rules and protocols are in effect in the design studios and classes as well as other education-related environments. The Honor Code of the University of Memphis Department of Architecture states: "I will not lie, cheat, or steal nor tolerate those who do." Students must also abide fully by the policies, rules, and regulations set forth in the Department of Architecture Student Policies Manual and the applicable documents of the University of Memphis. Among these are the Code of Student Rights and Responsibilities and the University of Memphis Code of Student Conduct – Academic Dishonesty. More information on these codes may be found at the following websites: (http://saweb.memphis.edu/judicialaffairs/csc/CSRR.pdf) and (http://saweb.memphis.edu/judicialaffairs/dishonesty/definitions.htm).

#### **EDUCATIONAL OBJECTIVES:**

By the end of this course of study a student should be able to:

- 1. Evaluate various environmental systems, both conventional and alternative, in a broad and integrated context,
- 2. Analyze the societal and urban implications of sustainable development,
- 3. Apply acoustical principles to design situations,
- 4. Evaluate building envelope designs,
- 5. Evaluate natural lighting strategies
- 6. Apply knowledge of current vertical conveyance, security/communication and fire protection systems.

## **NAAB CRITERIA:**

This course addresses at a minimum the following NAAB Student Performance Criteria: 4, 15, 17, 19, 21, 22, 23

For additional information, visit the NAAB website at http://www.naab.org.

#### **INSTRUCTIONAL METHODOLOGY:**

The course is organized around a series of exercises tied to the thematic topics of the course. Illustrated oral presentations of case studies, readings and discussions will supplement.

- 1. *Exercises:* Several exercises will be assigned to familiarize the students with analysis techniques for building systems.
- 2. Research and Analysis Projects (Case Studies): Case studies of noteworthy building systems will be assigned where students will evaluate a range of building systems and their integration. More information will be provided in separate handouts.
- 3. Readings and Discussion: Reading assignments are outlined in the course schedule. All students are expected have completed the readings prior to the class meeting. Discussions relate to readings, projects, and lectures. Students are expected to actively participate in discussions.
- 4. Exams: Exams will be given at the close of each unit to assess student comprehension of lecture material.

- 5. *Lectures:* Lectures complementing the specific topic under consideration will be given periodically. These may be augmented by slides and handouts and correspond to the assigned readings.
- 6. Field Trips: Several field trips are planned to visit local installations of systems mentioned in class. Also field trips will be necessary for successful completion of class projects. Each student is required to sign the departmental release and submit a departmental medical form prior to any off campus travel.

#### **EVALUATION:**

All work must be complete and submitted on time - no late work will be accepted.

As per the Department of Architecture and University of Memphis standards, graduate students must maintain an overall GPA of 3.0 (B). Grades of D and F will not apply toward any graduate degree, but will be computed in the GPA. No more than seven hours of C+, C, or C-will be applied towards meeting graduate degree requirements.

#### 1. Breakdown:

Research and Analysis Projects: 75%
Examinations and Exercises: 20%
Attendance and Participation: 5%
100%

2. Grading Scale: The University plus/minus grading scale will be utilized in this course. The overall grading scale is as follows:

98 - 100% Α+ 94 - 97% Α 90 - 93% A-87 - 89% R+ В 84 - 86% 80 - 83% B-C+ 77 - 79% С 74 - 76% C-70 - 73% 65 - 69% D+ 0 - 64% D F 60 - below

**TEXTBOOKS:** The following textbooks are required and must be in the studio:

Mechanical and Electrical Equipment for Buildings (required)
Stein, Reynolds, Grondzik and Kwok
John Wiley and Sons Inc.
Eleventh Edition - 2009
ISBN 978-0470195659

Sun, Wind and Light (required)
G. Z. Brown
John Wiley and Sons Inc.
Second Edition – 2001
ISBN 0471348775

Heating, Cooling, Lighting: Design Methods for Architects (recommended) Norbert Lechner John Wiley and Sons, Inc. 2001

Supplemental readings from a variety of sources will be assigned.

NOTE: Textbooks from previous Architecture Program will be used periodically and must be in the studio.

### **COURSE ASSIGNMENTS:**

Below are the major projects and exercises for the semester. A detailed description for each will be provided.

Exercise 1	Wind Analysis
Exercise 2	Campus Temperature Analysis
Exercise 3	Heat Loss Calculation and Temperature Gradient
Exercise 4	Heat Gain Calculation
Exercise 5	Sun Shading Strategies
Exercise 6	Natural Light Levels
Exercise 7	Artificial Lighting
Project 1	TERRA Energy Use Analysis
Project 2	FPC Hernando Fellowship Hall Acoustic Analysis

Final Project Jones Hall Sun Shading

### ATTACHMENTS: Architecture Rules of Conduct, Architecture Attendance & Participation Policy

### STUDENTS WITH DISABILITIES:

Any student who may need class or test accommodations based on the impact of a disability is encouraged to speak with me privately to discuss your specific needs. Students with disabilities should also contact Student Disability Services (SDS) at 110 Wilder Tower, 678-2880. SDS coordinates reasonable accommodations for students with documented disabilities. Reasonable and appropriate accommodations will be provided to students with disabilities who present a memo from SDS. Students who request disability accommodations without a memo will be referred to SDS.

### **RELEASE FORMS:**

The Department of Architecture Release / Hold-Harmless Agreement must be completed and signed by each student before taking any off-campus trips, including trips within Memphis. The Medication Release Form must be completed for any out of-town trips. Students must print and complete the forms during the first week of classes and submit them to the instructor. These forms may be found at http://architecture.memphis.edu/TravelRelease.pdf.

**SEPARATE COVER:** Schedule, Assignments

# Security and Control Systems

# Security systems should be a coordinated approach including:

- - Surveillance
- **Access Control Visual Control**

## Video Systems

# Intercom Systems

- One Way
- Two Way

# **Coordinated Access systems**

- **Electric strikes**
- Card Access
- **Exit Only Doors**

### Visual control

- View Shades
- Electrically Actuated Glass
  - Site Considerations









ARCH 7421 – Advanced Environmental Systems - Issued 1/13/2011

Mook	Date	Dasding	Lartura/Nicruscian Tonic
	Date		בברות ב/ הוצרמפותו ומלור
1 R	13-Jan		Course introduction – basic environmental considerations
2 T	18-Jan		Microclimates/Macroclimates - Degree days, seasonal effects
R		20-Jan MEEB Chapter 3 - Sites and Resources and Chapter 4 - Comfort and Design Strategies and SWL 1-11	Wind, shared shade, heat islands, regional strategies.
3 T	25-Jan		Climate based planning, indigenous and vernacular construction, energy and ecologically based planning.
R		27-Jan MEEB Chapter 6 - Solar Geometry and Shading and SWL 26-45, 99, 82, 80,	Ventilation corridors, urban pattern implications. "Solar Envelope"
4 T	1-Feb		Calculations - thermal resistance, temperature gradient, design temperature.
R		3-Feb MEEB Chapter 7 - Heat Flow and SWL 15-23	Heat flow concepts, calculations - heat loss/gain, shading coefficients.
5 T	8-Jan		Computer Simulation - Energy Plus - Part I
8		10-Feb MEEB Chapter 8 - Designing for Heating and Cooling and SWL 12-14	TEST
1 9	15-Jan		Heating metrics, conventional heating strategies Alternative heating strategies, case studies
R		17-Feb MEEB Chapter 9 - HVAC for Smaller Buildings and SWL 46-109	Wind/ventilation metrics, conventional ventilating/cooling strategies
7 T	22-Jan		Alternative ventilation/cooling strategies, case studies
R		24-Feb MEEB Chapter 10 - Large Building HVAC Systems and SWL 46-109	Computer Simulation - Energy Plus - Part II
8 ⊤	29-Jan		Terra Analysis
R		3-Mar SWL 46-109	Terra Analysis
T 6	8-Jan		
R	10-Mar		
10 T	15-Jan		Integrated skin systems, Earth sheltering, alternative envelope systems
~		17-Mar MEEB Chapter 11 - Lighting Fundimentals and Chapter 12 - Lighting Sources	Photovoltaic systems, case study
11 T	22-Jan		TEST
R		24-Mar MEEB Chapter 13 - Lighting Design Process and Chapter 14 - Daylighting Design	Trip to Zero Energy House
12 T	29-Jan		Lighting metrics, day-lighting strategies
В		31-Mar MEEB Chapter 15 - Electric Lighting Design and Chapter 16 - Electric Lighting Applications	artificial lighting strategies, integrated lighting, case study
13 T	5-Jan		Basic acoustical design, design strategies
R		7-Apr MEEB Chapter 17- Fundmentals of Building Acoustics	Trip to FPC Hernando
14 T	12-Jan		Sound Transmission and Absorption
R	14-Apr		TEST
15 T	19-Apr		Fire protection
W.		21-Apr   MEEB Chapter 24 - Fire Protection and Chapter 30 - Signal Systems	Communications and Security Systems
⊥		27-Apr MEEB Chapter 31- Vertical Transportation	Vertical Circulation

### Acoustics, Elevators, Fire Protection and Security Systems ARCH 7421 – ADVANCED ENVIRONMENTAL SYSTEMS

Department of Architecture • College of Communication & Fine Arts • University of Memphis

Acc	oustics	
1)	v	Which of the following statements is true regarding sound in the built environment?
	a.	Sound is highly disruptive and should be controlled using sound absorbers.
	b.	All rooms should be designed to limit reverberation to the lowest possible amount to achieve better acoustical performance.
	c.	As an architect I am only concerned with sound generated inside my building.
	d.	Acoustical design should respond to the various needs of the building type and occupancy.
2)	\	Why are Decibels used in expressing the intensity of sound?
	a.	They were just looking for a way to honor Alexander Graham Bell
	b.	The range of sound intensity is so large that it is most easily expressed in a logarithmic expression
	c.	Decibels are easy to combine arithmetically
3)	1	The speed of a sound is dependent on which of the following?
	a.	The material the sound is going through.
	b.	The product of the Frequency and the Wavelength
	c.	The intensity of the sound
	d.	All the above
	e.	A & B
	f.	B & C
4)	\	Which of the following statements is the best definition for "Sound Pressure?"
	a.	The local pressure deviation from the ambient (average, or equilibrium) pressure caused by a sound wave.
	b.	The means by which sound travels.
	c.	The depth beneath the surface of water that sound waves will not go.
	d.	The ability of a material to withstand sound propagation.
5)	W	hich of the following best describes the conditions in a reverberant field?
	a.	The area of a sound field where the primary sound is dominant
	b.	The area of a sound field where reflected sound is dominant
	c.	The area of a sound field where the no sound is dominant
6)	A	sound field is made up of three areas
	a.	Free field, near field, and reverberant field
	b.	Near field, reverberant field, and reflective field
	c.	Reverberant field, co-verberant field and reflexive field
	d.	Free field, wave coincidence field, and reverberant field

7)	Th	e Haas effect
	a.	Is the law that governs how much of the energy of a particular sound will be absorbed by a material
	b.	Instructs us that all sound strategies are unimportant except sound absorption
	C.	States that when two identical sounds originate from different locations the mind of the listener will attempt to integrate those sounds into a single sound from an imaginary source seemingly between the real origination points spatially.
	d.	Indicates that sound waves encountering a perforated barrier will bend causing defraction.
8)	WI	nen attempting a "sound masking" strategy what is an important consideration?
	a.	To find appropriate sound absorption materials
	b.	To check the surface density of the wall materials to enhance sound reflectance
	C.	To match the appropriate wavelength of introduced sound to the sound we are intending to mask.
	d.	Sound masking is a waste of time and money
9)	WI	nat happens when sound encounters a solid material?
	a.	All the sound energy is converted to heat
	b.	All the sound energy is either absorbed, reflected or transmitted
	c.	All the sound energy is expended in setting up sympathetic vibrations in the material
	d.	All the sound energy is reflected back to the source
10)	WI	nich of the following are true for a sound barrier installation along a highway?
	a.	Diffraction of low frequency sound will be greater and the acoustical shadow zone will be resultantly smaller
	b.	Diffraction of high frequency sound will be greater and the acoustical shadow zone will be resultantly smaller
	c.	Sound will be eliminated for any element in the optical shadow zone
11)		nen designing a lecture hall intended for listening to the non-amplified spoken word, the designer
	should.	
	a.	Try to limit the amount of reverberation by using sound absorbers
	b.	Try to control the time difference between primary sound and echo by installing sound reflectors
	c. d.	Choose materials designed to perform with the frequency of voice All the above
12)	WI	nat would be an example of a volume sound absorber?
	a.	Batt insulation
	b.	Acoustical concrete blocks
	c.	White sound or acoustical masking
	d.	Carpet covered acoustical panels
13)	WI	nat characteristic is important when choosing materials to be used as a sound reflector?
	a.	Surface density
	b.	Distance from the primary sound
	c.	Intensity of the primary sound

14)	W	hat characteristics are important when choosing materials to be used as a porous sound absorber?
	a.	Surface area
	b.	Frequency of the sound to be absorbed
	c.	Linked interior cavities
	d.	All the above
	e.	None of the above
15)	Soi	und Transmission Coefficient (STC) can be described as
	a.	A method of rating sound transmission performance of a wall or floor/ceiling assembly at
		different frequencies by means of a single number.
	b.	Single number rating to express sound absorbing capabilities of a material.
	c.	It is the decimal fraction of the incident sound waves that are absorbed by the material,
		depending on frequency.
16)	w	hich characteristics effect performance of sound absorbers?
	a.	Thickness and density
	b.	Panel perforation size
	c.	Sound intensity
	d.	Rock or Hip-hop
17)	W	nich of the following are strategies to inhibit sound transmission in a wall assembly?
	a.	Increasing the thickness of sound absorbing materials
	b.	Breaking the path of sound from one side of the partition to the other by staggering studs, using metal studs or acoustically broken studs
	c.	Using a sound isolating connector between studs and sheathing that utilize a spring or rubber gasket
	d.	All the above
	e.	None of the above
18)	Re	verberation is the persistence of sound in a particular space after the original sound is removed.
	a.	True
	b.	False
19)	So	und decays with time and distance.
	a.	True
	b.	False
20)	Describ	e the relationship of the Haas effect to echos.

### Vertical Circulation and Fire Protection

21)	W	ho invented the fist elevator in 1852?
	a.	Charles Garnier
	b.	Joseph Paxton
	c.	Elisha Otis
	d.	Arthur Schindler
22)	Th	e Americans with Disabilities act has affected the design of elevators by requiring which of the
	followin	ng?
		1. Braille Signage
		2. Visual Signals
		3. Grab Bars
		4. Size of Cab
		5. Auditory Signals
	a.	1 & 2
	b.	1,2 and 3
	c.	1,3, 4 and 5
	d.	All the above
23)	Please I	ist five (5) safety features the code frequently requires elevator installations to include.  1
24)	In a two	o story adaptive reuse project with a 14'-0" floor to floor, what type of elevator would you suggest y?
25)	A L	.U/LA type elevator can be defined as
	a.	A type of freight elevator
	b.	A low cost elevator that has specific code requirements, usually less stringent than a
		conventional elevator, but are of limited use and access.
	c.	Another name for a material lift

26)	Ma	aterial lifts are found in industrial and medical installations and are typically rated for heavy loads
	of peop	ole and materials.
	a.	True
	b.	False
27)	In	a hydraulic elevator installation, what is the purpose of a hoist beam?
	a.	To allow fire fighters a means of moving heavy equipment during an emergency
	b.	To allow for installation of the car
	c.	The allow access to the smoke vent for proper maintenance
	d.	To allow access to the bottom of the pit for sump maintenance.
28)	WI	hich one of the following is <i>FALSE</i> about elevator shafts?
	a.	Elevator shafts are usually required to be fire rated to prevent fire from passing vertically from one floor to another.
	b.	Elevator shafts typically have a "pit" below the bottom stop to allow the passenger car to descend to the lowest level appropriately.
	c.	Access to the pit and mechanical aspects of the elevator must be carefully designed.
	d.	Tolerances from the elevator manufacturer about shaft size and placement of anchor points are
		simply suggestions. The designer has a lot of latitude within the standard packaged unit.
29)	In	an elevator shaft, what is the purpose of side rails?
	a.	To allow for mechanical access
	b.	To keep the hydraulic tubing properly aligned
	c.	To give a smooth stop at the bottom level.
	d.	To keep the car from moving laterally in the shaft
30)	In	an elevator system, what is the purpose of a counterweight?
	a.	To achieve greater energy efficiency
	b.	To provide stability to the system in an earthquake situation
	c.	To aid in stopping the car if their was a cable break
31)	WI	hich of the following are examples of passive fire control systems?
		1. Deluge system
		2. Fire rated partitions
		3. Wet sprinkler system
		4. Preaction system
	a.	1 & 2
	b.	1 only
	C.	2 only
	d.	1,2 and 4
	e.	All the above

_		
_		
-		
_		
-		
) _	WI	nich of the following are true statements about smoke vents?
		1. They are frequently installed in shafts over two stories
		2. They are frequently installed in atrium spaces
		3. Smoke vents are never required by code but are good practice
		4. They can have a fusible link and/or be tied to a detection system for actuation
	a.	1 & 2
	b.	1,2 and 3
	c.	1,3, and 4
	d.	1,2 and 4
	e.	2 and 4
-		
	14/1	sich of the following are nessible for a smalle detectors or a smalle detection system?
) _	vv	nich of the following are possible for a smoke detectors or a smoke detection system?
		1. Battery powered
		<ul><li>2. Using photo electric sensors to detect smoke</li><li>3. Hard wired or powered from the building's electricity</li></ul>
		3. Hard wired or powered from the building's electricity
		4. Using ionized particles and a radioactive sensor
	a.	4. Using ionized particles and a radioactive sensor
	-	<ul><li>4. Using ionized particles and a radioactive sensor</li><li>5. Allows the fire department to control the elevator</li></ul>
	-	4. Using ionized particles and a radioactive sensor 5. Allows the fire department to control the elevator  1 & 2 2 and 3
	b. c.	4. Using ionized particles and a radioactive sensor 5. Allows the fire department to control the elevator  1 & 2 2 and 3
) _	b. c. d.	4. Using ionized particles and a radioactive sensor 5. Allows the fire department to control the elevator  1 & 2 2 and 3 1,2, 3, and 4
) _	b. c. d.	4. Using ionized particles and a radioactive sensor 5. Allows the fire department to control the elevator  1 & 2 2 and 3 1,2, 3, and 4 1,2,3,4 and 5
) _	b. c. d.	4. Using ionized particles and a radioactive sensor 5. Allows the fire department to control the elevator  1 & 2 2 and 3 1,2, 3, and 4 1,2,3,4 and 5  nich of the following statements is <i>FALSE</i> about heat detectors?
) _	b. c. d. Wl	4. Using ionized particles and a radioactive sensor 5. Allows the fire department to control the elevator  1 & 2 2 and 3 1,2, 3, and 4 1,2,3,4 and 5  nich of the following statements is <i>FALSE</i> about heat detectors?  Are generally less sensitive than a smoke detector

· ———	following can an addressable fire system control panel be designed to control?
	Equipment shut down
	Sprinkler flow control
	Door hold-open relays
4. 0	Communication devices
a. 1	
b. 1,2 and 3	
c. 1,3, and 4	
d. All the ab	
e. None of t	he above
38)Which of the	following is a definition for a fire damper?
a. Another r	name for a sprinkler head
b. A part of system.	a duct system that closes and prevents smoke and fire from migrating through the duct
c. A vent tha	at opens in fire situations to allow smoke to leave the building
d. A panel th	nat allows for the discharge of hot gasses from a building to prevent explosion
39)Fire shutters a	and magnetic hold opens are used in fire suppression systems to allow access by fire
fighters.	
a. True	
b. False	
40)A good securi	ty system will coordinate surveillance, access control and visual control
a. True	
b. False	

### **COURSE SYLLABUS**

### ARCH 7211 - Contemporary Theory

### Department of Architecture • College of Communication & Fine Arts • University of Memphis

Fall 2011 (subject to change)

Class time 9:40 – 11:05 am Tuesday and Thursday Room – JO 404

Instructor Pam Hurley

Office

Office Hours Please check schedule posted on office door

Phone

Email pjhurley@memphis.edu

**CATALOG:** Critical study of contemporary theoretical writings and related architectural design,

production; contemporary issues informing current architectural discourse; the

Modernist canon and "-isms" from the mid-twentieth century to the present.

**OVERVIEW** This course introduces students to the concepts of Theory in Contemporary

Architecture as well as outside influences on those theories. Through readings, research, and analysis, students develop critical thinking and analytical writing skills. Writing assignments will delve into evaluation, interpretation, and meaning toward a deeper understanding of theoretical concepts and how they may be put to use for

the students' future work.

### **POLICIES:**

The current version of Department of Architecture Policies and Procedures, attached by reference, will be enforced in this class. The following supplement these Policies:

- 1. Cellular telephones and paging devices must be turned off during class.
- 2. Attendance at all course sessions and full participation in sessions are required in accordance with the Department of Architecture Attendance and Participation Policy.
- 3. Each assignment must be submitted in its original form and will be retained by the Department of Architecture.
- 4. Posting Information online will be considered the same as a handout. Transmittal of information via e-mails shall be considered the same as a handout or announcement in class.
- 5. Reasonable and appropriate accommodations will be provided to students with disabilities who present a memo from Student Disability Services (SDS). Students who request disability accommodations without a memo will be referred to SDS
- 6. Except as otherwise approved in advance by the instructor, guests are not permitted to attend classes.
- 7. All assignments must be completed on time.
- 8. Academic Dishonesty. Because architecture and interior design are professions regulated by state legislation and with a code of ethics governing professional conduct, similar rules and protocols are in effect in the design studios and classes as well as other education-related environments. The Honor Code of the University of Memphis Department of Architecture states: "I will not lie, cheat, or steal nor tolerate those who do." Students must also abide fully by the policies, rules, and regulations set forth in the Department of Architecture Student Policies Manual and the applicable documents of the University of Memphis. Among these are the Code of Student Rights and Responsibilities and the University of Memphis Code of Student Conduct Academic Dishonesty. More information on these codes may be found at the following websites: (http://saweb.memphis.edu/judicialaffairs/csc/CSRR.pdf) and (http://saweb.memphis.edu/judicialaffairs/dishonesty/definitions.htm).

Syllabus: ARCH – Fall 2011 Page 1

### **EDUCATIONAL OBJECTIVES:**

- To develop skills that will assist students in exploring, analyzing, and critically evaluating selected theoretical principles, writings, and their influence in the realm of architectural design, and urban planning
- 2. To develop a critical eye and voice that can identify theories and theorists and their impact within schools of architectural thought, the world of art and design
- 3. To develop the ability to articulate, both in written form and verbally, the student's own opinion(s) of selected theoretical works and ultimately their own design philosophy.
- 4. To assist the student to create a self-guided process necessary for research and analysis in order to produce scholarly writings that articulate their own opinions and philosophies Ideally with the goal of publishing
- 5. To provide the student with a framework for future research, critical analysis and potential topics for thesis work

### NAAB CRITERIA:

This course addresses the following NAAB Student Performance Criteria:

A1, A2, A5, A7, A9

Students should consult the NAAB website (www.naab.org) for detailed information.

### **METHODOLOGY:**

This course is designed with an interactive approach to the typical lecture class; providing the student with opportunities for hands on learning. Students will participate in discussions and lead lectures based on readings as well as conduct presentations of research. Readings will be taking from the required text as well as selected texts, handouts and electronic articles. Research and analytical writing will be a key component throughout the semester, with a final project being a public presentation/defense of the students' chosen topic. Refer to the schedule following for the selected readings and assignments. (schedule is subject to change)

### REQUIREMENTS:

All students are required to complete the reading assignments listed and provide three questions (in writing) to promote class discussion. There will be occasional spontaneous writing sessions following selected discussions. Students will be assigned selected texts on which they will lead the class lecture, or present visual presentations that will support the assigned subject. A Final research paper will be required which will provide support for the public presentation/defense.

Additional readings, information and updates will be posted on eCourseware. It is the student's responsibility to check eCourseware daily for such items.

### **EVALUATION and GRADING:**

In addition to this being a class based on oral presentation, discussion, and debate, this class will have a writing intensive component. Graduate students are expected to present written material throughout the semester and will be given the opportunity for re-writes and feedback. The University provides assistance with writing through the Writing Center 901.678.4435.

### **GRADING:**

- Leading Lectures: Each student will be assigned at least two class periods to assist the Professor in leading the lecture/discussion of the selected topic. 25% of final grade
- Visual Presentations: These powerpoint presentations will be assigned to support the lecture/discussions. At least one per student for the semester 25% of final grade
- 3. **Writing**: There will be several written assignments of varying styles during the semester. Grading will be based on commitment to the free-writing, thoughtfulness and through work on the scholarly writing assignments. (The Writing Center is available on Campus to proof and assist the process)

Syllabus: ARCH – Fall 2011

30% of final grade

4. **Participation:** Includes contribution to daily class discussions, enthusiasm, preparedness of the readings, collaboration, and attendance. 20% of final grade

Grading Scale: The University plus/minus grading scale, will be utilized. The overall grading scale is as follows:

A 90 - 100% B 80 - 89% C 70 - 79% D 60 - 69% F 59 - below

As per the Department of Architecture and University of Memphis standards, graduate students must maintain an overall 3.0 GPA (B). Grades of D and F will not apply toward any graduate degree, but will be computed in the GPA. No more than seven hours of C+, C, or C- will be applied towards meeting graduate degree requirements.

Only extenuating circumstances beyond the control of the student (e.g. serious accident or illness, death in immediate family, etc.) are considered a valid reason for missing class or requesting an extension of a deadline. It is essential that presentations to the class be made as scheduled and except for emergencies, missed presentations not excused by the instructor at least 48 hours in advance may result in a failing grade or may be otherwise penalized at the instructor's discretion. Extensions due to extenuating circumstances may be allowed at the discretion of the instructor.

### TEXTBOOK: Theories and Manifestos of Contemporary Architecture

Charles Jencks and Karl Kropf (required)

Towards an Architecture
Le Corbusier (recommended)

Learning from Las Vegas
Robert Venturi (recommended)

Eyes of the Skin

Juhani Pallasmaa (recommended)

Thinking Architecture

Peter Zumthor (recommended)

**Derrida for Architects** 

Richard Coyne (recommended)

ADDITIONAL READING:

Supplemental readings may be assigned, either in the form of handouts or electronic transmittal. *Please check eCourseware on a regular basis.* 

### **RELEASE FORMS:**

The attached release form must be completed and signed by each student before taking any off-campus trips, including within Memphis. Students must print and complete the release form during the first week of classes, then initial the form on the front page and submit it to Chris Whitehead. The medication form must be submitted at least one week prior to any out-of-town trip.

### ATTACHMENTS:

Class Schedule

Department of Architecture Policies (attached by reference)

Release Forms

University of Memphis

Department of Architecture

Fall 2011

### **ARCH 7211 – Contemporary Architectural Theory**

### Class Schedule – *subject to change*

Readings and assignments will be posted on eCourseware, please check on a regular basis. The schedule will include student led discussions/presentations on readings.

08.30	Tuesday	Introduction to Free-writing
		What is Architecture? (Architecture vs. Art)
09.01	Thursday	Aesthetics, Art, Ethics, and Architecture
09.06	Tuesday	Modernism and Manifestos
09.08	Thursday	Modernism, Futurism
09.13	Tuesday	Free-writing in class
09.15	Thursday	Modernism challenged – space and place (the in-between)
09.20	Tuesday	Between the Folds
09.22	Thursday	Contingencies and the Concept of Ma
09.27	Tuesday	Critical Regionalism and Post-modernism
09.29	Thursday	Post-modernism
10.04	Tuesday	Post-modernism, Japanese concepts of Aesthetics
10.06	Thursday	Post-modernism in Japan, Metabolism, Traditionalism, Ecology, and more ma
		Additional free-write (response to previous readings and Alan Watts quote)
10.11	Tuesday	Traditionalism, The NY 5, The whites and the greys
10.13	Thursday	Environmental Psychology & Post-modernism
10.18	Tuesday	Fall Break
10.20	Thursday	Database research, refworks workshop (meet at McWherter Library)
10.25	Tuesday	Free-writing in class, discussion of paper topics
10.27	Thursday	Phenomenology - Zumthor
11.01	Tuesday	Phenomenology, Husserl, Heideggger, Merleau-Ponty, Eyes of the Skin
11.03	Thursday	Deconstructivism, The Realistic Manifesto
11.08	Tuesday	Cosmogenesis - China, Africa, Fractals, Sacred Geometry
11.10	Thursday	Discussion of refined research topics and approaches to final paper
11.15	Tuesday	Urbanism - Utopias
11.17	Thursday	Urbanism in the Middle East, traditionalism and cultural identity
		Writing assignment - Formal essay response to previous readings and cultural
		heritage and traditions
11.22	Tuesday	Discussion/responses of writing assignment
		Rough draft of research paper due
11.24	Thursday	Thanksgiving Break
11.29	Tuesday	Student assigned readings (based on final research topics)
12.01	Thursday	Student assigned readings (based on final research topics)
12.06	Tuesday	Final Day for paper revision questions, discussion, review
12.13	Tuesday	Final version of Research Paper due 10:30 am

University of Memphis

Department of Architecture

Fall 2011

### ARCH 7211 – Contemporary Architectural Theory Cultural Heritage and Traditions: Analysis Essay

Due: November 22, 2011

In response to the readings of the past two class periods, write a brief essay addressing what you think are important issues concerning cultural heritage, architecture and urban planning. Address the concern or lack thereof regarding specific identity found through the built environment and its influence on communities, their identity, and their success. Please use at least four outside sources (these may include the readings from class or additional research).

### Thus our assignment is as follows:

Task: Create a written research/analysis essay regarding the embrace, loss, or insignificance of cultural heritage and traditions within the urban design context. This will be a 3-4 page paper (additional pages may be used if necessary) that will address your ideas and philosophies regarding Cultural Heritage and traditionalism in Architecture and Urban Design. Please include outside sources to support your theories - cite your sources.

Assigned: November 17,2011 Due: November 22, 2011.

University of Memphis

Department of Architecture

Fall 2011

### ARCH 7211 – Contemporary Architectural Theory Free-writing

Due: Prior to each class meeting

This is a skill that will serve you well as you prepare for your final research paper, and ultimately for the Thesis process next fall.

### A paraphrase of Natalie Goldberg's "Rules for Free Writing":

- Give yourself a time limit. Write for one or ten or twenty minutes, and then stop.
- Keep your hand moving until the time is up. Do not pause to stare into space or to read what you've written. Write quickly but not in a hurry.
- Pay no attention to grammar, spelling, punctuation, neatness, or style. Nobody else needs to read what you produce here. The correctness and quality of what you write do not matter; the act of writing does.
- If you get off the topic or run out of ideas, keep writing anyway. If necessary, write nonsense or whatever comes into your head, or simply scribble: anything to keep the hand moving.
- If you feel bored or uncomfortable as you're writing, ask yourself what's bothering you and write about that.
- When the time is up, look over what you've written, and mark passages that contain ideas or phrases that might be worth keeping or elaborating on in a subsequent free-writing session.

### Thus our assignment is as follows:

**Task:** In response to assigned reading, please do at least a 15 - 20 minute free-write of your reaction to the reading, concepts may include: understanding, questions, observances, rebuttals, epiphanies, etc. This may be typed or handwritten, whichever serves you and the process best. These must be submitted into the dropboxes on eCourseware prior to the next class meeting. Occasionally you may be asked to read from or to discuss your observances with the class. You may be asked to complete free-writing assignments that are focused on a particular statement or subject or that may be done within class time.

Assigned: August 30, 2011

Due: Prior to each class, unless otherwise specified.

University of Memphis

Department of Architecture

Fall 2011

### ARCH 7211 – Contemporary Architectural Theory In-class Free-writing

Due: September 15, 2011

Objective: to stimulate creative responses and new approaches to analysis and writing, to challenge the concepts of descriptive language and concepts of architectural theory.

Using your free-writing technique, explore the following statements with a set time-frame of 5-10 minutes. Keep the rules in mind – you may stray, repeat, whatever is necessary to keep the thoughts and words flowing. We will discuss your outcomes and the process at the end of class.

- 1) If Modernism were a color what would it be?
- 2) What is your favorite color?
- 3) Create a list of words that describe the importance of architecture.
- 4) Create a list of words that describe a specific example of architecture that fails to meet the above list.
- 5) What is your favorite building material and why?
- 6) Go back to your two colors describe the value, intensity, feeling, quality of each color.
- 7) How do they compare, contrast, enter-mingle with each other.
- 8) Thinking about the readings thus far, and your previous writing today, write about your own work in relation to Modernism, refer to your words lists above and readings as necessary.

### Assignment:

Reflecting on your readings and your free-writing in class today, you will complete another free-writing session in response to one of the following choices below. This free-writing will be then be used as a basis for a more formal analysis essay on your chosen quote. The free-writing and typed essay should be placed in the dropboxes prior to class – September 15, 2011.

- Christian Norberg-Schulz theorizes that "perception of form has a cultural basis and meaning in architecture is the result of cultural intentions." Do you agree? How does Modernism, in particular, the International Style come into play regarding your opinion.
- 2) Charles Jencks and Nathan Silver argue in Adhocism: "Today we are immersed in forces and ideas that hinder the fulfillment of human purposes; large corporations standardize and limit our choice; philosophies of behaviorism condition people to deny their potential freedom; 'modern architecture; becomes the convention for 'good taste' and an excuse to deny the plurality of actual needs." Do you agree? Disagree? Why?

Assigned: September 13, 2011 Due: September 15, 2011

University of Memphis

Department of Architecture

Fall 2011

### ARCH 7211 – Contemporary Architectural Theory Final Research Paper

Due: December 13, 2011 10:30 am

In response to the readings of the semester and your own research and interests, select a topic for further research, exploration, and written analysis. This will become your final research paper. You will be expected to treat this as a scholarly writing assignment, which means - in-depth research, thoughtful analysis, clear writing, and citations that apply to either MLA or APA format. Multiple variations of your writing will be turned in as part of the process of creating the final version of this paper. Your topic must be approved by the instructor, but may be adjusted and refined as your research leads toward a deeper understanding of the selected topic. Again, this is a scholarly writing assignment, the length should be determined by your depth of research and understanding of the topic, but must be at least 15 pages in length — you may include photographs, diagrams, sketches, etc as needed but these are in addition to the minimum page requirement. (Please use the resources available through the library and the writing center on campus.)

Thus our assignment(s) are as follows (and may be subject to change):

### Task1

Free-write on three topics that peak your interest. Ideally, one of these topics will become your final choice for your research paper. Keep the free-writing to at least 15-20 minutes per topic. These will be discussed in class (due 10.04)

### Task 2:

Choose one of the above three (or a version there of) for your final research topic.

### Task 3:

Continue to free-write, exploring how the reading assignments affect your understanding of your chosen topic (when they apply), in-class discussions may also direct your free-writing, and outside research will be an essential part of this process. (discussion of topics and progress – 10.25)

### Task 4:

Synthesize and select elements of your free-writing to create an outline for your paper topic. This should include elements of your free-writing and may include quotes and sections of your research. This may be in whatever format best serves your process. (Due 11.03)

### Task 5:

Create a Rough Draft – further refining the writing, adhering to MLA or APA format. (Due 11.22)

### Task 6:

Final revised version of Research Paper. (Due 12.13 at 10:30 am)

### **COURSE SYLLABUS**

### **ARCH 4221 - DETERMINANTS OF MODERN DESIGN**

Dept. of Architecture College of Communication & Fine Arts University of Memphis

Semester: Fall 2011

**Issue Date:** Aug. 29, 2011; subject to revision

Section 001: Lecture, 9:40- 11:05 a.m., Mon- Wed, Jones Hall (JO) Room 407/409

**Instructor:** Prof. James Williamson

Office: JO 406

Office Hours: By appointment; please see schedule posted on office door.

Telephone: (901) 678.5669 (office)

E-mail: jfwllmsn@memphis.edu

**CATALOG: ARCH 4221.** Determinants of Modern Design. (3). Significant works of architecture and urban design from 1900 to the present; focus on Europe, United States, non-Western world; examination of architecture as a mode of cultural production in relation to its aesthetic.

Prerequisite(s): ARCH 1211, ARCH 1212 or equivalent

Corequisites: None

### **EDUCATIONAL OBJECTIVES:**

- 1. To introduce students to the seminal theories underpinning works of Modern and contemporary architecture.
- 2. To familiarize students with techniques of critical thinking and analysis relative to architectural works.
- 3. To convey that architecture may be viewed as works of material culture, and as such, should be considered within the historical and social context of the societies that produced them.

### **INSTRUCTIONAL METHODOLOGY:**

- 1. Illustrated lectures will be supplemented with handouts and coordinated readings from the textbooks. Questions and class discussions are strongly encouraged. (From time to time the reading assignments listed on the Course Schedule may be supplemented by additional assignments in the form of handouts or selections from books placed on reserve.)
- 2. Images shown in class will be posted on E-Courseware for use in reviews and preparation for examinations.
- 3. Except as otherwise indicated, a short quiz will be administered on Mondays covering the readings and class presentations for the previous week (or since the last quiz.)
- 4. A mid-term examination will be given on the date listed in the Class Schedule.
- 5. A final examination will be scheduled during exam week.
- 6. A final paper will be due at the end of the semester on the date indicated in the Class Schedule.

**NAAB CRITERIA.** This course addresses the National Architectural Accrediting Board (NAAB) (http://www.naab.org/) Student Performance criteria in the following categories: A1 Communication Skills, A2 Design Thinking Skills, A5 Investigative Skills, A9 Historical Traditions and Global Culture.

**POLICIES.** The current version of *Department of Architecture Policies and Procedures*, attached by reference, apply in this class. The following requirements supplement these Policies:

- 1. Each student is responsible for the completion of all assigned readings. Readings specific to each topic should be completed prior to the lecture presentation of that topic in class. Students should be prepared to discuss material covered in the readings.
- 2. Attendance at all class sessions is required. The classroom door will be closed at the start of instruction. Students arriving after the start of instruction will not be admitted and will be counted as absent, as will students sleeping in class or leaving early. Excused absences will only be allowed as outlined under the Program's Attendance Policy.
- 3. In order to help prevent the spread of colds and flu, students who are suffering from flu-like symptoms are asked <u>not</u> to come to class until they have fully recovered. Please notify Prof. Williamson by e-mail if you are absent due to illness.
- 4. The Participation component of the final grade includes attendance, contribution to class discussions, motivation, and professionalism.
- 5. Cellular telephones and paging devices must be switched off during class. Text-messaging, e-mailing, or the use of laptops during class are not permitted.
- 6. Consumption of food is not permitted in the classroom.
- 7. Reasonable and appropriate accommodations will be provided to students with disabilities who present a memo from Student Disability Services (SDS). Students who request disability accommodations without a memo will be referred to SDS.

### **EVALUATION and GRADING:**

1. Students are expected to assume responsibility for monitoring their own progress in this course. No later than mid-semester, any student with concerns will be expected to arrange an informal private meeting with the Prof. Williamson to review performance and identify any areas that require special attention. The meeting should be scheduled during regular office hours and should be arranged approximately a week in advance. Students should bring a list of any questions or special concerns, and should record minutes of the discussion. (Additional meetings may also be arranged for special concerns as needed.)

2. Final grades will be assigned based on the following:

Weekly guizzes, each weighted equally, totaling:

Mid-term exam:

Final exam:

Final paper:

Participation:

15% of final grade

25% final grade

25% final grade

25% final grade

10% final grade

100%

- 3. Grading Scale: The University plus/minus grading scale will be utilized in this course.
- 4. Only extenuating circumstances beyond the control of the student (e.g. illness, death in immediate family, etc.) are considered a valid reason for requesting an extension of deadlines or make-up exams. Make-up exams or extensions of deadlines may be allowed at the discretion of the instructor. If a student must miss an exam or deadline, he or she is required to contact the instructor *in advance* or, in the case of an emergency, very shortly afterward. Unexcused late assignments may not be accepted and/or may be penalized, at the instructor's discretion.
- 5. In accordance with Architecture Department policy, a minimum grade of "C" (2.0) is required to successfully complete courses within the major.

**TEXTBOOKS:** Students should immediately purchase a copy of each of the following, normally available at the University Bookstore:

Modern Architecture Since 1900
 William J. R. Curtis
 Phaidon Press, Inc.
 1996 (Third Edition)

2. American Architecture David P. Handlin Thames & Hudson 2004 (second edition)

 Pioneers of Modern Design Nikolaus Pevsner Penguin Books, 1972

**MATERIALS and SUPPLIES:** Students should purchase and utilize a 1" diameter (minimum) three-ring binder in order to maintain handouts and notes distributed in class.

### ATTACHMENTS:

Department of Architecture Policies attached by reference: <a href="http://architecture.memphis.edu/ormanfa09.pdf">http://architecture.memphis.edu/ormanfa09.pdf</a> Class Schedule
Final Paper Assignment
Example of a Critical Essay

ARCHITECTURE 4221: CLASS SCHEDULE

**FALL 2011** 

FALL 2011

	TOPIC	<u>CURTIS READING</u>	HANDLIN READING	OTHER READING	REMARKS
	The Continuity of Older Traditions	17- The Continuity of Older Traditions		n/a	
	Nature & the Machine	16- The Image & Idea of Le Corbusier's VIIa Savoie at Poissy; 18- Nature & the Machine: Wies van der Rohe, Wright & Le Corbusier in the 1930s	n/a	"The Failure of Falling Water" (posted on eCourseware)	
	Modernism Diversifies	21- International, National, Regional: the Diversity of a New Tradition; 27- Process of Absorption: Latin America, Australia, Japan	n/a	n/a	
. —	The Post-WWII period in the U.S.	22- Modern Architecture in the USA: Immigration and Consolidation, p. 395	8- From Less is More to Less is a Bore	n/a	Quiz
100	The Late Works of Le Corbusier	23- Form and Meaning in the Late Works of Le Corbusier; 24- Unite d'Habitation nat Marseilles as Collective Housing prototype	n/a	n/a	
	Alvar Aalto	19. The Spread of Modern Architecture to Britain & Scandinavia; 25- Alvar Aalto na 1960 Scandinavian Developments; 26- Disjunctions & Continuties in the Europe of 1960 Scandinavian Developments; 26- Disjunctions & Continuties in the Europe of 1960 Scandinavia.	n/a	n/a	Quiz; synopsis of final paper due
	Louis Kahn-l	28- On Monuments and Monumentality; Louis I. Kahn n	n/a	n/a	
	Louis Kahn-II	n/a	n/a	To be posted on eCourseware	Quiz
-	Modernism on Trial	30- Extension & Critique in the 1960s n	n/a	n/a	
-	Robert Venturi	n/a	n/a	Excerpts from Venturi, "Complexity & Contradiction in Architecture;" "Learning from Las Vegas" (posted	Quiz
	Reactions: Post-Modernism; Anti- Architecture in Britain	29. Architecture & Anti-Architecture in Britain	n/a	Handout: Jencks, "The Rise of Post- Modern Architecture;" "13 Propositions of Post- Modernism"	
	Thanksgiving				
	Post-Modernism and Pluralism	32- Pluralism in the 1970s, p. 589 n	n/a	Handouts: Prince Charles & Krier	Quiz
	New Urbanism and the Developing World	31- Modernity, Tradition & Identity in the Developing World; 34- The Universal & In the Local: Landscape, Climate & Culture	n/a	n/a	
-	New Directions-I	33- Modern Architecture & Memory: New Perceptions of the Past, p. 617	9- Looking Backward and Forward	n/a	Quiz
-	New Directions-II	35- Technology, Abstraction & Ideas of Nature, p. 657; Conclusion, p. 685 n	n/a	n/a	Final Paper Due, 5:00 pm

### MID-TERM EXAMINATION ARCH 4221 - DETERMINANTS OF MODERN DESIGN Dept. of Architecture College of Communication

Oct. 12, 2011

Dept. of Architecture College of Communication & Fine Arts

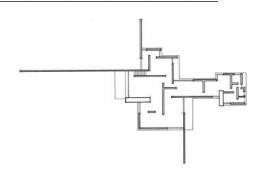
**University of Memphis** 

	s each = 30 points)
2	
3	
4	
5	
6	
7	
8	
10	
11	
12	
13	
14	
15	
Part 2: Short A	<b>.nswer.</b> Fill in the blanks. (10 at 2 points each = 20 points)
1. Why was the	e 1892 Columbian Exposition said by Sullivan to have set American architecture
<ol> <li>Why was the back 50 years</li> <li>Perhaps the famous archite</li> </ol>	

3. Vers une Architecture was written by	in the year
4. Ebenezer Howard's utopian plan for relocating worke	ers to a new town in the countryside was
5. For which Chicago architectural firm did Frank Lloyd \ career?	Wright work at the beginning of his
6. What did William Morris think of machines?	
7. Who designed a bank in Grinnell, lowa and also wrote were to abandon ornament and concentrate entirely of finely shaped and charming in their sobriety?"	on the erection of buildings that were
8. About 1910, the best place to have found Walter Gro Corbusier standing around the water cooler would have	•
9. A leading American proponent of the Reguy Arts who	a lad the School of Architecture at the

10. Identify the designer and project illustrated by the floor plan shown below:

University of Pennsylvania and designed the Pan American Union was



**Part 3: Discussion.** Using the space below and the back of the exam, fully discuss <u>one</u> of the following. (50 points)

1. It is the mid-1930s and you have been named to the Board of Directors of the elite "Utopian Society," the only architect member. At your first meeting, you discover that the Board is involved in an acrimonious debate about the selection of an architect for its proposed new Museum of Early 20th Century Architecture and Design.

The Board hopes to commission an iconic statement of cutting edge design that will showcase the best architecture since 1900, and that will stand the test of time as a work of architecture in its own right. The architects who have been put forward as candidates for the museum include Le Corbusier, Albert Speer, and Mies van der Rohe.

Mrs. Bertha Bigfoot-Crowbar, the Chairman of the Board, asks that you help resolve the debate by ranking these in your order of preference. Write a memo to Mrs. Bigfoot-Crowbar beginning

by summarizing the zeitgeist, the prevailing spirit of the times in architecture. Then, based on their current and completed work and what you know of their personalities and philosophy, analyze both the strengths and weaknesses of each of these 3 candidates for this project, and compare them to the others. Cite several relevant buildings designed by each, including details of their location, date, and design concept, to support your case. Finally, explain who you would recommend and why he would be the best choice for the project.

2. It is the mid-1930s and you have just graduated from architecture school at the top of your class. Being the ambitious sort and full of self-confidence, you resolve to find an internship with one of the world's top design architects. After researching the possibilities you narrow your search down to 3 possibilities: Frank Lloyd Wright, Raymond Hood & Associates, or Julia Morgan.

Based on their current and completed work and their philosophy, analyze both the strengths and weaknesses of each, and compare them to the others. Cite several relevant buildings designed by each, including details of their location, date, and design concept, to support your case. Finally, rank these 3 in your order of preference, explaining your reasons.

Papers will be collected at 11:05.

This examination is administered under the Honor Code of the Department of Architecture. I pledge that I have neither given nor received help on this examination,

### ARCH 4221 – Determinants of Modern Design Final Paper Assignment Fall 2011

**Introduction.** This course aims to introduce students to the seminal design theories underpinning works of Modern and contemporary architecture and to develop critical thinking abilities with respect to architectural design. The content includes exposure to a fairly large number of significant works of architecture and urban design from the mid-nineteenth century to the present in Europe, United States, and the non-Western world. Of necessity, limited class time permits us to explore few of these projects in detail. Your final paper will afford you the opportunity to do so, as well as to establish and defend a critical position.

**Assignment.** Your assignment is to write an exhaustive, illustrated critical analysis of a significant completed building or project that you feel contains serious design shortcomings or flaws. The selected project must have been designed by one of the architects covered in the reading assignments. However, the project you select may <u>not</u> have been covered, except for a brief mention, in the class presentations. (If in doubt about this, you should seek advance approval of your proposed topic from Prof. Williamson.)

Your paper must include a.) the architect's design theories and how these are manifested (or fail to find expression) in the project you select, b.) how the design of the project relates (or fails to relate) to its site and/or program, c) how the design of the project reflects (or fails to reflect) the larger cultural context, including the prevailing values of the time and place in which it was designed, and d.) why you believe the overall design has shortcomings or flaws.

This assignment will address the development of the following abilities, as set forth in the NAAB accreditation standards: Communication Skills, Design Thinking Skills, Investigative Skills, Historical Traditions and Global Culture.

The content of your paper is to be your own work and while it should demonstrate a keen awareness of ideas advanced by others on your topic, it must not be limited to what others have thought or said.

Research and Analysis. Your paper should include both research and critical analysis. The <u>research component</u> will consist of ideas advanced <u>by others</u>, including the selected architect. It may include specific comments about your selected project by noted critics or architectural historians, which may be either positive or negative. It should include observations or arguments about how your selected architect's work was influenced by others and how it relates to the larger cultural and historical context. Finally, it should include ideas advanced by others about how this building or project relates to the works of other architects and/or the design theories of your selected architect. (It is important to include properly acknowledged references to the ideas of others using footnotes in proper format.) Note that in selecting your project you should do enough preliminary investigation to determine whether sufficient research sources are available.

The <u>analysis component</u> is to consist of an original design critique of your selected project. In this part of your paper, you are to take a stand and express your own thoughts and opinions. (Note that you are not to merely describe the building, although a critical description may be included in your critique.) *Your opinions must, however, be supported by your research and by observations documented in your illustrations.* Your analysis must be sufficiently detailed to demonstrate a complete understanding of all significant design aspects of the project.

**Illustrations.** Your paper is to include illustrations of your main points, keyed to the text so as to allow the reader to fully understand your observations. Illustrations may be copied from the Internet or from other sources, but must include appropriate citations.

At a minimum, your paper should include:

- biographical sketch of the selected architect
- project type, location, and dates

- client
- program synopsis
- physical and cultural context
- principal design concept
- original critique of the design shortcomings, e.g. failure to fulfill the designer's theoretical goals and/or the client's programmatic requirements, lack of adequate response to environmental and cultural forces, inappropriate use of materials, insensitive scale or proportioning, etc.
- your thoughts on how these design flaws might have been avoided
- illustrations of your main points keyed to the text and with captions
- footnotes citing principal sources: at least 5 books, films, or journal articles (not counting the assigned reading)

**Observations on Theory.** The idea of a theory is to simplify things, so that it is possible to act. Architecture is complicated, and stands in need of theories. – Andrew Ballantine, "Architecture Theory"

Theory [from Greek theoria]

- 1. The analysis of a set of facts in their relation to one another.
- 2. The general or abstract principles of a body of fact, a science, or an art.
- 3. A hypothesis assumed for the sake of argument or investigation.
- 4. Abstract thought: speculation.

Every successful work of architecture has at its foundation a theory, a thoughtfully developed idea for translating the requirements of site, program, budget and schedule into a building. Far from being a restrictive formula, a theory establishes the parameters within which the quantitative and qualitative needs and expectations of a design may be explored. As the composer Igor Stravinsky wrote, "My freedom... consists of moving about within the narrow frame I have assigned myself for each one of my undertakings".

Architecture is at its best when it is provocative and investigatory; it is at its worst when it reverts to rehashing hackneyed themes and thoughtlessly mimicking stylistic trappings.

In looking over the historical literature, there are a number of issues that repeatedly are addressed in the theories of others:

Physical context Cultural context Relationship to history

MemoryStructure/TectonicsMaterialityOrnamentRelationship to NatureSpaceFormOrdering principlesFunction

Proportion/scale Technology Architecture and urbanism Regionalism Phenomenology Ecology/Sustainability

**How to write your paper.\*** The successful architect must be able to write as well as design. The following is a brief outline of things to consider when writing your paper. The guidelines below are meant as a framework to be used to structure your own ideas.

- 1. Think carefully about what you feel strongly about: You should be passionate about your selected project.
- **2. Have defined points:** You should edit your thoughts, discarding all but the most essential ideas. Make the points unequivocal and easily understood.
- 3. Be clear and concise: Know what you want to say and say it. Defend your position.
- **4.** Check spelling and grammar: Writing quality will be an important component of your grade. Remember that you are writing for public consumption. Use spell check, but don't rely on it to catch all errors. Thoroughly proofread your drafts.

- **5. Limit your use of technical jargon:** You are writing for a general audience in addition to your peers. Select language that can be understood by both.
- 6. Be confident and assertive: Speak your mind and share your beliefs with conviction.
- 7. Present the facts: When it comes to evaluating the theories and work of others, avoid simply expressing your unsubstantiated opinion. An opinion is, variously: "a belief based on grounds insufficient to produce certainty;" "a personal attitude or appraisal;" or, "the formal expression of a professional judgment." Opinions, even educated ones, are *not* facts. Facts can be proven; opinions can't. Facts are verifiable; opinions aren't.
- **8. Expect to be challenged:** One reason for this exercise is to initiate a life-long discourse regarding what is of value *to you* in architecture. Don't expect everyone to agree with your beliefs; in fact, you should be disappointed if they do. Different does not necessarily mean wrong.
- **9. Be critical:** Critical does not mean insulting; rather it means, "characterized by careful, exact evaluation and judgment," and may be either positive or negative. A critic is "one who forms and expresses judgments of the merits, faults, value or truth of a matter." (An example of a very brief critical essay is enclosed.)
- **10. Have fun:** This is your chance to express yourself. Be creative and have fun.

\*Adapted from How to Write a Manifesto, http://www,geocities.com/Area51/Labyrinth/8584/howto.html?20076

### **Length, Formatting and Style.** The following additional requirements apply to your paper:

- Length: 4,000 5,000 words
- Format: 12-point type, double-spaced, bound, paper size 8-1/2" x 11".
- Cover page including paper title, your name, date, and "ARCH 4221 Determinants of Modern Design"
- Style: Grammar, usage, punctuation, footnotes, etc. are to conform to the *Chicago Manual of Style*.
- Research sources: You should bear in mind that information found on the Internet can be incomplete or even erroneous. While limited use of the Internet may be helpful during preliminary research, any such information must be verified through more reliable sources such as books and periodicals by reputable publishers. (Be especially wary of the reliability of Wikipedia.) Except for illustrations, research sources cited may not include web pages or other Internet sources. For books cited, references are to include library call number in addition to standard bibliographical data. Magazines, periodicals, and films must be cited by name, title, author, and date.
- All ideas by others must be acknowledged, whether directly quoted or paraphrased.
   Quotations must be italicized or enclosed in quotation marks. Failure to acknowledge sources will be considered plagiarism, which is an honor code offense. At the end of your paper is to be included the following statement, followed by your signature: "On my honor, I have neither given nor received unacknowledged assistance on this assignment."

**Grading.** Your paper will be graded according to the following criteria:

- Original critical content: 50%
- Knowledge of the theories and work of your selected architect and others as they apply to your selected project: 40%
- Following directions, organization, grammar, punctuation, spelling, and clarity of expression: 10%

**Time Schedule.** A 750-1000 word preliminary synopsis of your paper will be due on the date indicated on the Class Schedule. The synopsis should follow the same formatting and stylistic guidelines as the final paper and should represent a sample of your best writing. The synopsis should include:

introduction, including the name, location, and date of your selected project and architect

- one illustration of your selected project
- project type and summary of major design concepts of your selected project
- at least 3 overarching theoretical design principles in the work of your selected architect
- other relevant architects, theories, and issues that you plan to discuss
- a succinct statement of why you believe the project design is seriously flawed

The completed paper is due on the date specified in the Class Schedule. As stated in the Syllabus, unexcused late assignments may not be accepted and/or may be penalized, at the instructor's discretion.

Enclosure: Example of a critical essay, "The Kennedy Library" by Ada Louise Huxtable, 1973

### **COURSE SYLLABUS**

### ARCH 7930 - ARCHITECTURE THESIS RESEARCH STUDIO

Department of Architecture • College of Communication and Fine Arts • University of Memphis

Fall 2011 (Syllabus - issue date 13 September 2011) (TENTATIVE - Subject to Revision)

Section 001: Studio JO 303 1:00pm - 4:00pm Tuesday

Instructors: Sherry Bryan, Pam Hurley Office: Sherry - JO 404D, Pam - JO 302

Office Hours: posted and by appointment - Please check schedule on office doors

Telephone: 901.678.2724

E-mail: sbrynhgg@memphis.edu, pjhurley@memphis.edu

CATALOG:

Study and research in a specific area culminating in an integrating experience through Individual project; research techniques, preliminary research, and conceptual development of an architectural project; site analysis and selection, case studies; development of thesis proposal and body of written thesis. Grades A-F or IP will be given. 5 credit hours.

PREREQUISITES: Permission of Instructor

POLICIES:

- 1. The guidelines for classroom conduct outlined in the Architecture Program Studio Rules shall be observed at all times. Additional information can be found at: http://architecture.memphis.edu/ormanfa09.pdf
- 2. Attendance and full participation at all class sessions are required in accordance with the Architecture Program Attendance and Participation Policy.
- 3. Cellular telephones and paging devices must be turned off during studio.
- 4. Students are expected to complete all assignments in a timely and professional manner.
- 5. Each assignment must be submitted in its original form and may be retained by the Department of Architecture. All projects are to be photographed by the student for possible inclusion in portfolios.
- 6. Posting information on line shall be considered the same as a handout.
- 7. Transmittal of information via University of Memphis e-mails shall be considered the same as a handout or announcement in class.
- 8. Reasonable and appropriate accommodations will be provided to students with disabilities who present a memo from Student Disability Services (SDS). Students who request disability accommodations without a memo will be referred to SDS. If you have additional questions regarding accommodations for disabilities, please see the SDS website: : <a href="https://www.memphis.edu/sds">www.memphis.edu/sds</a>
- 9. Academic Dishonesty. Because architecture and interior design are professions regulated by state legislation and with a code of ethics governing professional conduct, similar rules and protocols are in effect in the design studios and classes as well as other education-related environments. The Honor Code of the University of Memphis Department of Architecture states "I will not lie, cheat, or steal nor tolerate those who do." Students must also abide fully by the policies, rules, and regulations set forth in the Department of Architecture Student Policies Manual and the applicable documents of the University of Memphis. Among these are the Code of Student Rights and Responsibilities and the University of of Memphis Code of Student Conduct Academic Dishonesty. More information on these codes may be found at the following websites:

(http://saweb.memphis.edu/judicialaffairs/csc/CSRR.pdf) and (http://saweb.memphis.edu/judicialaffairs/dishonesty/definitions.htm).

10. The University of Memphis guidelines for preparation of a thesis or dissertation must be understood. http://www.memphis.edu/gradschool/tdinfo.php

### **OBJECTIVES**

- 1. Explore fundamental elements of architecture and design theory and practice relative to personal interests.
- 2. Enhance in-depth academic research abilities through an understanding of the characteristics of qualitative, quantitative, analytical, and descriptive (statistical) research techniques.
- 3. Demonstrate an ability to apply academic research methods and techniques.
- 4. Foster critical evaluation skills and independent thinking.
- 5. Investigate the role of precedents in design and related areas of research.
- 6. Select a Thesis Committee and chair and secure approval from each.
- 7. Complete a scholarly Thesis Proposal and document acceptable to faculty and committee members.
- 8. Be prepared to start the design portion of Thesis Project in the spring 2011 semester.

NAAB CRITERIA: This course addresses the following NAAB Student Performance Criteria (http://www.NAAB.org) at the level indicated:

A-1, A-2, A-3, A-5, A-7, A-9, A-10, B-1, B-2, B-3, B-4, C-1, & C-2

INSTRUCTIONAL This course is organized around research and analysis projects supported by readings, discussions, presentations, and scholarly writing.

> Research & Analysis Projects: Exercises that investigate an aspect of architecture and design that will be the focus of the thesis will be conducted. More information will be provided in separate handouts.

> Readings: All students are expected to have completed appropriate readings prior to the class meeting and to actively participate in discussions.

> Discussions: Discussions relate to readings, projects, and so forth. Students are expected to participate in discussions.

> Student Presentations: Presentations complementing the specific topic under consideration will be given periodically. These may be augmented by slides and handouts.

> Sketchbooks: Each student must keep a dedicated sketchbook in which critical points from the readings, class discussions, presentations, as well as personal insights into the subjects are recorded. The sketchbook should combine questions, discoveries, and further selected research in a written and graphic format. The sketchbook must be submitted at the end of the semester.

> Studio Book: A book consisting of portfolio-quality pages must be prepared and submitted at the conclusion of the term. In addition, a CD containing the images and pages must be submitted.

REQUIREMENTS: Each student will complete the assignments described herein. These are intended to assist in the selection of a thesis subject and establish appropriate lines of inquiry, collect data, identify and analyze relevant precedents, synthesize the research findings, and generate preliminary design schemes and strategies. These will form the basis for the Thesis Studio project to be completed in the spring semester.

Research & Analysis Projects

Overall research and analysis of the idea or hypothesis Precedents and Other Specific Research Studies

Site Analysis

Formal Thesis Proposal, Outline of Thesis (including process and methodology)

Timeline for future Thesis work Working drafts of thesis writing

Other Projects and Exercises

Readings, Discussions, Presentations Sketchbooks, Thesis Notebook

Studio Book

GRADING:

All work must be complete and submitted on time. Students must earn a grade of C or the course must be repeated.

1. Breakdown:

Research and Analysis Projects: 80% Other Projects and Exercises: 10% Attendance and Participation: 10%

2. Grading Scale: The University plus/minus grading scale will be utilized in this course. The overall grading scale is as follows:

90 - 100% A

80 - 89% B

70 - 79% C

60 - 69% D

59 - below F

RELEASE FORMS: The Department of Architecture Release/Hold-Harmless Agreement must be completed and

signed by each student before taking any off-campus trips, including trips within Memphis. The Medication Release Form must be completed for any out-of-town trips. Students must print and complete the forms during the first week of classes and submit them to the instructor. These forms may be found at http://architecture.memphis.edu/TravelRelease.pdf.

TEXTBOOKS: Reference and books associated with research vary based on the research topic.

Supplemental readings form a variety of sources may be assigned.

**SUPPLIES**: Refer to the list of required drafting supplies and materials.

OTHER ITEMS: The following are incorporated by reference: Department of Architecture Rules of Conduct,

Department of Architecture Attendance & Participation Policy, Department of Architecture Policies

Manual (http://architecture.memphis.edu/ormanfa09.pdf).

SEPARATE COVER: Course Calendar

### GRADUATE RESEARCH

University of Memphis

Department of Architecture

Fall 201

### **ARCH 7930**

### **GRADUATE RESEARCH DATES / DEADLINES**

\*\*These do NOT include the dates and deadlines for the Graduate School – please check their website for specifics.

**SEPTEMBER 20** – **Visual Presentation** - 4 BOARDS (one refined thesis proposal)

Electronic boards 20x20 of images, quotes, concepts

Ideas, themes, inspiration

SEPTEMBER 27 - Chair selected (form- as with all forms, one copy to chair, one copy

to be included in thesis workbook, one copy in dropbox on

ecourseware)

OCTOBER 4 - Committee designated, Thesis Proposal Approved (Thesis proposal

form signed which includes, methods, bibliography, etc) Site selected

**NOVEMBER 1** - **Precedent Studies** – presented (format to be determined)

NOVEMBER 22 - Presentation of Thesis proposal (with inspiration boards, precedent

studies) before graduate faculty. Outline of Thesis Proposal, and action

plan (time line) signed by entire committee (form)

**DECEMBER 6** - Writing sample presented (this is a work in progress, to include rough

draft(s), working outline, revisions, notes, updates, etc.)

WINTER BREAK DESIGN WORK MUST BEGIN

JANUARY 9 - Weekly meetings begin with committees – continue thesis update

sheets in notebooks. (form)

JAN, FEB, MARCH – DESIGN WORK AND WRITTEN WORK CONTINUES (schedule regular

meetings with Committee and Writing Center)

MARCH 12 – 16 FINAL REVIEW WEEK WITH COMMITTEES (scheduled on your own

time with all committee members) \*\* this presentation will conclude in 1 of two ways: 1 – you are advised to make revisions and prepare for the final defense 2 – you will be advised to make preparations to reconsider and rework your research and design concepts – and will not be allowed

to defend in the current semester. (form)

MARCH 17 – 15 REVISIONS PER COMMITTEE (revisions to presentation and thesis

book - final review with Writing Center, remember only 30 minute time

slots are scheduled)

MARCH 26 – 30 THESIS DEFENSE WEEK (Must be scheduled during the school day –

(check this with committee members before they agree to participate)

(form)

MARCH 31 – FINAL REVISIONS

APRIL 5

APRIL 6 NOON SUBMIT THESIS FOR REVIEW TO MICHELLE (forms)

APRIL 7 – 16 REVISE THESIS PER MICHELLE (this is for formatting, not content)

APRIL 17 UPLOAD THESIS TO ETD

APRIL 20 TURN IN COMPREHENSIVE EXAM RESULTS (form)