University of Oklahoma

Interim Progress Report for 2017

*Instructions and Template*

[November 30, 2017]
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1. INSTRUCTIONS AND TEMPLATE GUIDELINES

Purpose
Continuing accreditation is subject to the submission of interim progress reports at defined intervals after an eight-year or four-year term of continuing accreditation is approved.

This narrative report, supported by documentation, covers three areas:
1. The program’s progress in addressing not-met Conditions, Student Performance Criteria, or Causes of Concern from the most recent Visiting Team Report.
2. Significant changes to the program or the institution since the last visit.
3. Responses to changes in the NAAB Conditions since your last visit (Note: Only required if Conditions have changed since your last visit)

Supporting Documentation
1. The narrative should describe in detail all changes in the program made in response to not-met Conditions, Student Performance Criteria, and Causes of Concern.
2. Provide information regarding changes in leadership or faculty membership. Identify the anticipated contribution to the program for new hires and include either a narrative biography or one-page CV.
3. Provide detailed descriptions of changes to the curriculum that have been made in response to not-met Student Performance Criteria. Identify any specific outcomes expected to student performance. Attach new or revised syllabi of required courses that address unmet SPC.
4. Provide additional information that may be of interest to the NAAB team at the next accreditation visit.

Outcomes
IPRs are reviewed by a panel of three: one current NAAB director, one former NAAB director, and one experienced team chair. The panel may make one of three recommendations to the Board regarding the interim report:
1. Accept the interim report as having demonstrated satisfactory progress toward addressing deficiencies identified in the most recent VTR.
2. Accept the interim report as having demonstrated progress toward addressing deficiencies but require the program to provide additional information (e.g., examples of actions taken to address deficiencies).
3. Reject the interim report as having not demonstrated sufficient progress toward addressing deficiencies and advance the next accreditation sequence by at least one calendar year but not more than three years, thereby shortening the term of accreditation. In such cases, the chief academic officer of the institution will be notified and a copy sent to the program administrator. A schedule will be determined so that the program has at least six months to prepare an Architecture Program Report. The annual statistical report (see Section 9 of the 2015 Conditions) is still required.

Deadline and Contacts
IPRs are due on November 30. They are submitted through the NAAB’s Annual Report System (ARS). Contact Kesha Abdul Mateen (kabdul@naab.org) with questions.

Instructions
1. Type all responses in the designated text areas.
2. Reports must be submitted as a single PDF following the template format. Pages should be numbered.
3. Reports are limited to 25 pages/10 MBs.
4. Supporting documentation should be included in the body of the report.
5. Student work is not to be submitted as documentation for a two-year IPR.

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1 The team chair will not have participated in a team during the year in which the original decision on a term of accreditation was made.
2. EXECUTIVE SUMMARY OF 2015 NAAB VISIT

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3. TEMPLATE

Interim Progress Report  
University of Oklahoma  
Division of Architecture  
B. Arch. [160 undergrad credits]  
M. Arch. [Pre-professional degree + 53 credits]  
Last APR submission: September 6, 2013  
Year of the previous visit: 2015

Please update contact information as necessary since the last APR was submitted.

Chief administrator for the academic unit in which the program is located: Stephanie Pilat, Ph.D.

Provost: Kyle Harper, Ph.D , Interim Provost

President of the Institution: David L. Boren

Individual submitting the Interim Progress Report: Stephanie Pilat, Ph.D.

Name of individual(s) to whom questions should be directed: Stephanie Pilat, Ph.D.

Current term of accreditation: 8-year term
a. Progress in Addressing Not-Met Conditions and Student Performance Criteria

I.3.1 Statistical Reports

2015 Visiting Team Assessment: The institution has submitted Statistical Reports each year, and these were certified by the institution’s associate provost and director in a March 24, 2015 letter. However, the team’s review of the Statistical Reports revealed inaccuracies regarding faculty education, faculty salaries, and student demographics. These inaccuracies occurred in multiple reports.

U OK, 2017 Response: We have reviewed our statistical reports since 2010, identified errors and offer corrections whenever possible. Included in the appendix is a copy of the letter to NAAB requesting permission to update our entries on the NAAB website to reflect these updates and corrections.

I.3.2 Annual Reports

2015 Visiting Team Assessment: The Annual Reports available through the NAAB website and through the APR include the statistical information (which, as described above, contained errors and omissions). Also available was one Focused Evaluation Report dated 2012. The APR states: “The NAAB response to the 2012 Focused Evaluation Report is not posted on NAAB’s website.” Such a response was also not available to the team via the NAAB website. On the other hand, the NAAB did provide a one-page response to the 2011 Annual Report. In it, 10 items received identical feedback: “The program provided no new information from that presented in the 2010 annual report.” Three items are identified as being satisfied or having progress made. It appears that the 2010 Annual Report contained less information than the NAAB expected. Incidentally, the team also looked for narrative responses to deficiencies cited in the 2009 VTR, believing that a narrative would have been submitted each year in this regard. These were not available on the NAAB website or in the APR. This item is cited as not providing appropriate information due to inaccuracies in the statistical data.

U OK, 2017 Response: As noted above we have requested permission to update and correct previous statistical reports. Regarding the missing documents online such as the NAAB response, we have requested permission to upload the following to the NAAB website: the 2011 NAAB response; the 2012 Focused Evaluation; and the 2012 OU response. For historical context it is worth noting that there was a great deal of administrative turnover between 2008 and 2011, which may account for some of these issues. We are doing our best to ensure all documents are shared and all statistical errors corrected.

B.2 Accessibility

2015 Visiting Team Assessment: This criterion is still Not Met. Some evidence of ability regarding accessibility was found at the B. Arch. level in ARCH 4755: Design VLL Systems and Content and ARCH G5055: Design X Comprehensive Architecture II, and at the M. Arch. level in ARCH 5055: Design X Comprehensive Architecture II. However, student understanding appeared to be uneven and lacking in the many components of accessibility requirements. Consideration of universal accessibility design was not
commonly apparent. Path of travel through a site, accessible parking, building egress, and restroom design were spotty and undeveloped.

This criterion calls for ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

**U OK, 2017 Response:** Site and building accessibility is taught and demonstrated in a series of courses woven through the curriculum. Since the 2015 report we have redesigned key studio projects to ensure that they challenge students to demonstrate universal and accessible design principles.

Concepts and principles of accessibility are first introduced for undergraduates in: ARCH 2356 Design III, which emphasizes how program and users affect design. The following semester students take ARCH 2463 Methods IV, which emphasizes site considerations in regards to the natural environment and human factors; and ARCH 2456 Design IV, which challenges students to first engage site accessibility issues in the context of the hill town of Eureka Springs, Arkansas. Site locations have been selected to provide visual learning opportunities as students often observe adjacent buildings, entrances, and sidewalks not in compliance with accessibility standards, especially in Eureka Springs where the intense topography of the city and historic urban fabric has proven a challenge for accessible design. Experiencing architecture without accessibility standards helps students realize the importance of providing health, safety, and welfare for all occupants.

Accessible design principles are further put into practice and fully demonstrated in key upper level and graduate studios: ARCH 3556 Design V, which emphasizes site design including accessible paths of travel, accessible parking and paths of egress and ARCH 4756 Design VII and ARCH 5536 Graduate Design III, which both emphasize site accessibility while also demonstrating understanding of accessible restrooms and circulation between interior and exterior conditions.

Since 2015, the projects for these key studios have been re-invented to better allow students to demonstrate their abilities in regards to both universal/accessible design and site design. The project for Design V is now a farm-to-table restaurant with a market and gardens located along the Canadian River banks in Norman, Oklahoma. This project ensures every student must develop accessible parking and paths of travel throughout the complex site.

The project for ARCH 4756 Design VII and ARCH 5536 Graduate Design III has been reduced in scale and scope from a 15,000 – 20,000 square foot mixed use development in Kansas City to a 5,000 – 8,000 square foot Resiliency Design Education Center located on an 2 acre wooded site in Norman, Oklahoma which is part of a larger 8 acre parcel bordering Norman and Moore, Oklahoma. The more focused scope of the program and challenging topography of the site better enable students to showcase their abilities in regards to accessible design in terms of parking, paths of travel, restroom design, and egress. A series of in-class discussions, exercises, and references to ADA for accessible slopes/ramps, restrooms and fixtures, counter heights, handrails, guardrails, stairs and elevators including approaches and areas of refuge, visual acuity, parking, and surface changes and protrusions are constantly wrapped into project circulation, codes, and site development in Design VII / Grad Design III.
B.3 Sustainability

2015 Visiting Team Assessment: All students appear to have an understanding of wind roses, the need to consider sun-angle diagrams, and the existence of LEED checklists; however, there was not enough indication of how sun and day-lighting, wind, and other environmental factors influence design decisions. Work provided to the team did not adequately reflect ability with regard to environmental and material conservation, or the ability to produce designs that reduce environmental impacts into the future.

This criterion demands ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.

U OK, 2017 Response:
Since 2015, two key changes, in regards to teaching and demonstrating learning outcomes related to sustainable design, have been implemented.

First, as noted above, we have scaled down the project size for ARCH 4756 Design VII / ARCH 5536 Grad Design III, while at the same time providing a more complex site in terms of topography and natural landscape. Moreover, we have changed the program of this studio project to a Resiliency Design Education Center in order to better emphasize sustainable and resilient design principles. Finally, the studio is organized in response to the ACSA/AIA Committee on the Environment (COTE) Student Design Competition, which “challenges students, working individually or in teams, to submit projects that use a thoroughly integrated approach to architecture, natural systems, and technology to provide architectural solutions that protect and enhance the environment” (http://www.acsa-arch.org/programs-events/competitions/2017-2018-cote-top-ten-for-students). Every student in this studio is required to design their project with the COTE criteria in mind and submit their project to the ACSA COTE competition at the end of the semester.

Second, we have revised our required sustainable design seminars since 2015 to ensure students have more opportunities to develop an understanding of how design decisions are influenced by analyses of daylight, wind, building energy analyses, and ventilation. The Methods IV, V, and VIII courses have been reorganized to reflect sustainability within systems thinking and champion performance based design.

The first course, ARCH 2463 Methods IV – Sustainable and Resilient Systems I, focuses on passive design. The course examines passive systems related to site and climate and considers how those factors provide ecosystem services for the building to utilize. By the end of the course, students demonstrate the ability to understand performance-based design methodologies, and their impact upon building form including energy efficiency. The course teaches students to use new software applications to analyze their studio projects from the previous semester. Drawing on their analyses, students then redesign and revise their projects according to the results of their analyses regarding energy modeling, day-lighting, ventilation, climate, and site orientation.
The second course, ARCH 4563/5563 Methods V – Sustainable and Resilient Systems II, focuses on active systems and how they integrate with the passive systems from Methods IV. This course provides an introduction to active forms of thermal control, lighting, acoustics, egress, conveyance systems, plumbing and electrical systems, and the effects these systems have on buildings including life safety. Students study the impact of exterior environmental factors on HVAC and lighting systems, get an overview of systems selection criteria, preliminary calculation methods, and the implications of engineering principles on architectural design. Building on their understanding of code requirements and basic engineering fundamentals such as the thermodynamics of sensible and latent heat, lighting efficacy, day-lighting integration and operational aspects of HVAC with ventilation, students develop the ability to incorporate sustainability and resiliency principles within modern practice through both active and passive systems. Like Methods IV, this course uses software applications to challenge students to revise their design projects to better address sustainable design concerns.

The last course in the sequence, a graduate level seminar, is an advanced application and synthesis of the principles of sustainable design utilizing software methodologies the students have learned. ARCH 4863/5863 Methods VIII – Building Performance Analytics requires the students to complete the Autodesk Building Performance Analysis Certificate (BPAC) which uses the Autodesk Learning management System comprised of a series of self-paced online tutorials, quizzes and exercises. Autodesk software is the largest installed volume within the industry and understanding the interrelationship within the passive/active systems is important to students’ success as designers in practice. The BPAC covers Energy Literacy and Building Loads, Climate and Weather Analysis, Solar Measurements and Strategies, Wind & Airflow Strategies, Day-lighting Strategies & Analysis, and Whole Building Energy Analysis with Revit. The latter part of the semester requires that the Graduate Students enrolled in the class prepare a case study of their choice of DOE Solar Decathlon houses including how the design was impacted by performance based strategies and present the study to the class. This course ensures that our graduate students have truly advanced abilities in regards to sustainable design.

During the 2016-2017 academic year, a new college-wide Certificate in Resilient Planning, Design and Construction was created, based in the Division of Architecture. The certificate is intended to bring more focus to the area of resilience and sustainability. The certificate structure encourages students to take elective courses from planning, landscape architecture and interior design programs, in addition to other elective course offerings in architecture. In conjunction with this new certificate, the LEED elective seminar has been revised and now is more directed towards the Living Building Challenge. In spring 2017, at the prompting of Dean Butzer, a new USGBC student organization was formed. Students of that organization have been actively taking field trips to sustainable sites, leveraging funding available to them for such activities.

Taken together, the renewed emphasis on sustainability and COTE criteria in Design VII/Grad Design III, and the re-invented Methods IV, V, and VIII, the new resilience certificate, enhancement of the LBC/LEED seminar, and the formation of an active USGBC student organization not only demonstrate our commitment to meeting NAAB criteria in this realm, they reflect our faculty and students’ collective commitment to sustainability as a shared value.
2015 Visiting Team Assessment: The team was not able to locate student work that involved complex site conditions. As a result, the ability to respond to the site characteristics listed above was not evident. Abilities with regard to other aspects of site design, such as parking and travel to and through a site, were inconsistently reflected in student work.

This criterion demands ability to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.

U OK, 2017 Response: The 2015 Visiting Team noted that they were “not able to locate student work that involved complex site conditions.” In retrospect, we failed to share the work of the studio which places the greatest emphasis on site design, Design V. Rather we submitted work from Design VII and Design X, studios for which the sites at that time were relatively flat and urban sites and thus did not provide a stage for students to best showcase their abilities in regards to site design.

In response to the report, we have redoubled our efforts in our site design studio, ARCH 3556 Design V. This studio challenges students to develop comprehensive site designs including dealing with parking, paths of travel, and drainage, in response to landscapes with challenging topography. Moreover, the studio projects require students to design a progression of spaces that blur the line between indoors and out such as outdoor gardens, patios and paths.

The semester begins with conceptual exercises related to site design and field conditions. The first studio assignment asks the students to investigate topology and topography in a paper model. The paper model uses cuts, folds and bends to explore the concept of field conditions. The paper model is drawn in plan, with topographical lines, and in section.

Since 2015, we have changed the building program of this studio from a monastery to a farm-to-table restaurant with on-site gardens and market in order to further develop students’ understanding of the relationship between buildings and landscapes. Students research the agricultural processes associated with a particular ingredient such as wheat or hops, which becomes the focal point for their restaurant. The main assignment is the design of a building project located in an agricultural area by the Canadian River in Norman, Oklahoma. Students first document the site through observation, sketching, measuring, and through the collection of city maps and other resources. The 20-acre site requires students to properly locate and orient their buildings, community gardens, “natural” areas, and parking on the site. The students demonstrate how to do site grading, create accessible routes to their building(s) and choose appropriate site materials. A lecture on site design considerations by a professor from the Division of Landscape Architecture helps ensure students develop a comprehensive understanding of site design. Moreover, site grading vignette exercises completed in class require each student to actively engage site grading issues. The final project for the course demonstrates students’ ability in the technical considerations of site design and accessibility and also conceptually in regards to how the relationships between buildings and landscape reflect cultural values.

b. Plans for/Progress in Addressing Causes of Concern

- Student Project Display Area
2015 Visiting Team Comments: Students were united in their desire to have spaces where they could hang drawings to view, reference, and display during the design process. Faculty members and the division’s Professional Advisory Board shared similar concerns over the lack of pin-up space.

U OK, 2017 Response: Since 2015, the College of Architecture has undertaken a number of projects to ensure that students and faculty have the pin-up space necessary in any design school.

First, every studio desk was outfitted with a personal pin-up space the width of the desk and 24 inches high. Given that the studios have ribbon windows, wall space has been in short supply in studios. These personalized pin-up spaces allow every student to display work or sources of inspiration at their desk.

Second, 2,700 square feet of pin-up space has been added throughout Gould Hall. We now have spaces scattered throughout the building that allow for both informal and formal pin-up reviews as well as longer term displays of student work. Tables in the building have been relocated to allow for displays of models as well.

Ownership of Space

2015 Visiting Team Comments: Studio, lecture, and common spaces provided throughout this new facility are cutting edge and are greatly appreciated by students and faculty. However, cultivating a healthy and productive sense of pride and ownership on the part of the architecture students requires that students and faculty have an adequate ability to both “use” and maintain the studio spaces as needed to work comfortably and to produce the necessary architectural models, drawings, and creative experiments.

U OK, 2017 Response: The new Dean, Hans Butzer, was elevated from architecture faculty to Director and then from Director to Dean 2016. He brings to his leadership role an appreciation for the connection between a lively and robust studio culture and a sense of ownership of space. This perspective combined with his expertise as a design architect has ensured that providing students with a sense of ownership of Gould Hall has been high on his list of priorities. To this end, the rules for studio spaces have been relaxed and students have been encouraged to build more models, fostering a creative intensity in the studios. The Dean has secured a commitment from the University for the construction of a café within Gould Hall, which is hoped to further strengthen a sense of ownership of the building. Moreover, faculty and students have begun undertaking installation and exhibition projects throughout Gould Hall and at the Oklahoma City Design Center. The Rome Program students, for example, organized an exhibition at the Design Center in 2016 and in Gould Hall in 2017. An interactive installation showcasing the history of the American School (the name given to the school of thought and practice that emerged at OU under the leadership of Bruce Goff and Herb Greene in the ‘40s and ‘50s) is planned for January of 2018. This installation will take place in the Living Room of Gould Hall. Finally, Professor Dan Butko, an acoustics expert, is currently undertaking research on the acoustics of the Gallery in Gould Hall. This multi-purpose space hosts lectures, reviews, and social events and thus demands acoustical flexibility. Funded by grants and industry partnerships, Professor Butko is developing concepts for creating an acoustically flexible space. Just as we dim or brighten lights, so too would we be able to modify the acoustics of the space to fit the function.
• **Financial Autonomy**

2015 Visiting Team Comments: The institution distributes funds to the College of Architecture. The college’s dean allocates resources to the program, but maintains control of finances for all five divisions of the college. The dean also maintains control of roughly $16,000 collected each year from architecture students for the Consolidated Course Fee, which appears to go into one large pot that is allocated at the dean’s discretion. Fortunately, at this time, the architecture program has a great deal of input as to what kinds of resources, programs, and travel activities it would like the dean to fund. With past deans, this apparently was not always the case—and the existing system still has the potential to cause difficulty for the program. However, this level of budgetary autonomy appears to parallel that of other divisions of this size in the institution. There seems to be recent improvement in budgetary transparency for faculty members who are planning field trips and special programs. The team encourages continued refinement of the system for viewing and tracking budgets and expenditures.

U OK, 2017 Response: A new Interim Dean, Hans Butzer, was appointed in the spring of 2016 and then appointed as Dean in 2017. Dean Butzer was the Director of the Division of Architecture during the 2015 NAAB visit and experienced firsthand the negative effects of a lack of financial autonomy in the Division. He has expressed a desire to transfer control over the Consolidated Course Fees to the Division Directors rather than allocating them at the Dean’s discretion alone. Dean Butzer and Associate Dean Loon are in the process of gathering data to share with Directors. They will then work with Directors to develop a strategy for allocating these fees directly to Divisions based on the fees generated by each Division. The new budget model should be in effect starting in the next fiscal year (July 1, 2018 – June 30, 2019). It is anticipated that this increased financial autonomy should better enable the Division of Architecture to budget and thus plan for field trips, guest lectures, workshops and other special events. Despite these developments, Dean Butzer has signaled a cut to the Division of Architecture’s budget for 2017-18 by 20% (from $30,000 to $24,000) as well as to other Division’s budgets, due to fiscal uncertainty at the State level. The Dean has supplemented these funds at his discretion in order to provide for guest critics and other necessities. Although, we now have less financial autonomy due to these cuts, we expect a long-term solution to provide greater financial autonomy, which should be implemented before the next academic year. At the time of this report, Dean Butzer is finalizing a major endowment that will more than make up for any potential long-term cuts to the Division’s budget.

• **Adequate Faculty Numbers**

2015 Visiting Team Comments: Faculty members face increasing expectations to produce high-quality, funded, and publishable research—while maintaining high numbers of student contact hours each semester. Architecture students insist that they are benefitting immensely from their faculty’s high level of availability and willingness to help whenever called upon. The dean has a plan to fill one currently vacant faculty line this year and another next year. However, with additional retirements possible, it will be important to provide replacements. The current uncertainty and instability regarding funding for Graduate Assistants is an additional cause for concern on the part of the team.
U OK, 2017 Response: Two new tenure-track faculty (Cavieres and Richards), one visiting professor with a 2-year contract, one visiting professor with a 1-year contract, and two lecturers with 5-year contracts have been hired since the 2015 visit. In part, these new hires were intended to offset two resignations in 2017, one by an assistant professor and one by a lecturer. The University has also supported hiring a number of shorter term visiting professors and adjunct instructors to teach studio courses. Despite these meaningful gains, we anticipate a continuing need to hire more faculty to meet the demands of a growing student body (174 students in 2015 vs. 220 students in 2017). Under Dean Butzer, graduate assistant funding has been increased through Provost-approved recruiting assistantships. These complement assistantships available each year for second- and third-year graduate students.

• Faculty Recognition

2015 Visiting Team Comments: The architecture program has created an annual evaluation sheet that appears to be fair and to provide transparency. It has also established a new administrative structure.

U OK, 2017 Response: Faculty in the Division of Architecture continue to work to improve the transparency of annual evaluation criteria in order to ensure a diverse but critical range of creative activity and research are valued. Moreover, Dean Butzer has now challenged the other Divisions of the College to develop a similar framework for articulating and making transparent expectations for research and creative activity. This shared framework will allow each Division to better understand the variation in expectations by discipline. Given that all faculty in the College vote on every tenure and promotion case, a shared framework will help establish, make transparent, and distinguish disciplinary norms across the college.

• Life-Cycle Cost Analysis

2015 Visiting Team Comments: (Student Performance Criterion B.7. Financial Considerations) Although the financial considerations criterion is Met in 2015, direct student output illustrating an understanding of life-cycle cost analysis (LCA) was sparse. More emphasis should be placed on LCA in coming years.

U OK, 2017 Response: Since 2015, we have redesigned how we teach Life-Cycle Cost Analysis (LCA) in order to ensure students illustrate their understanding through carefully conceived assignments. The students’ understanding of LCA is developed through a sequence of three courses: ARCH 4723/5723 – Methods VII, ARCH 4756 – Design VII, Grad ARCH 5536 and ARCH 5923 – Methods IX.

Methods VII and Design VII (ARCH 5723 and ARCH 5536), which are taught as complementary seminar and design studios, introduce students to construction cost analysis and estimating within a short collaborative assignment with Construction Science students. Lectures introduce students to issues of building commissioning and post occupancy evaluations. Through in-class exercises students’ learn to evaluate potential costs of viable alternative materials. These lectures and exercises provide students with firsthand experience of the multilayered process of LCA factors including: schedule, environmental impacts of material choices; historical/vernacular issues; industry innovations; client bias; and the long term ramifications of initial design decisions. Issues such as durability, maintenance, carbon footprint, material
Students are introduced to various active, passive, and co-generation MEP systems in Methods VII and challenged to integrate systems into their own designs in Design VII. Research and software aids students in exploring resilient design features integral to the site, occupancy type, and quantifiable sustainable criteria.

This understanding of LCA is further developed in ARCH 5923 Methods IX- Entrepreneur and Leadership Architect, which is advanced coursework in the last year of matriculation for both undergraduate and graduate students in their professional degree program. Students demonstrate critical thinking beyond fundamental lectures on business and management acumen through debates, role-playing, pair-share conversations. Life-Cycle Cost is one of the topics feted: (a) lecture begins on the responsibility of the Architect on Cost Management of a Project (AIA A201 and B101 2017 Contracts); (b) students are assigned to investigate options for educating their clients on initial and running costs; and (3) examples of Life-Cycle Cost and its Analysis are discussed and debated related to Specification manipulation, Basic Service versus Additional Service(s) venues, and rejecting or accepting Certificates of Payment(s).

c. Changes or Planned Changes in the Program
Please report such changes as the following: faculty retirement/succession planning; administration changes (dean, department chair, provost); changes in enrollment (increases, decreases, new external pressures); new opportunities for collaboration; changes in financial resources (increases, decreases, external pressures); significant changes in educational approach or philosophy; changes in physical resources (e.g., deferred maintenance, new building planned, cancellation of plans for new building).

U OK, 2017 Response: The OU Division of Architecture has undergone two key changes since the 2015 accreditation visit. The first change is in leadership. Dean Charles Graham passed away in February of 2016. Division of Architecture Director Hans Butzer was appointed Interim Dean shortly thereafter and made Dean the following year. Dr. Stephanie Pilat, who had served as an Associate Director under Butzer, was appointed Interim Director in the spring of 2016 and Director in the fall of 2016. While the trauma of losing Dean Graham was keenly felt across the College of Architecture, these promotions from within have helped ensure stability and unity among faculty and students alike.

Along with this change in leadership came two changes in leadership structure. The College has downsized its administration from two associate deans to one and within the Division of Architecture from three associate directors to one associate director and a curriculum coordinator. Professor Marjorie Callahan retains the positions of Associate Director and Graduate Liaison for the Division of Architecture, positions she held under Director Butzer. Professor Dan Butko has been appointed Curriculum Coordinator for the Division of Architecture. In this role, Professor Butko chairs the Curriculum Committee and helps to manage the degree programs.

The second key change since 2015 is the introduction of a five-year Master of Architecture degree track. A 2015 OU Academic Program Review (APR) invited external architecture faculty from the University of Kentucky and Drury University to review our programs. The APR report noted a correlation between our enrollments and the introduction of the 5-year M.Arch track at schools in Kansas and Missouri. The APR reviewers also noted that our Bachelor of Architecture graduates were only 8-credits shy of earning a masters degree. Recognizing the need to maintain a competitive edge and the opportunity to work within our existing degree
offerings and course work, we created a track through which students could earn a Masters of Architecture in 5-years. Since we already had a Master of Architecture degree in place, the new track simply required carving out an accelerated bachelors degree track, a Bachelor of Science in Architectural Studies. In revising our curriculum to craft these options we were eager to maintain and strengthen the flagship degree in our program: the 5-year Bachelor of Architecture. To this end, we added a semester long internship to the B.Arch degree track to better distinguish it from the 5-year M.Arch. Now students can choose between a 5-year M.Arch degree that emphasizes research and leadership or a 5-year B.Arch degree that emphasizes preparation for practice and includes a semester long internship. Current fourth-year students are the first cohort eligible to apply. We were pleased to see that their decision is not easy: both are compelling and attractive tracks.

d. Summary of Activities in Response to Changes in the NAAB Conditions

2015 NAAB Conditions

U OK, 2017 Response: Our Curriculum Coordinator and Director have carefully reviewed the 2015 NAAB Conditions and created a new NAAB course matrix, which reflects the ways in which we anticipate addressing these changes. For each Student Performance Criteria, we have identified the courses where we expect content and skills to be introduced as well as criteria to be met. This new and revised matrix is included in the appendix.

e. Appendix (include revised curricula, syllabi, and one-page CVs or bios of new administrators and faculty members; syllabi should reference which NAAB SPC a course addresses)

U OK, 2017 Response: Included in the Appendix are the following:
• A letter to NAAB regarding errors in previous Annual Statistical Reports and requesting permission to make corrections;
• 1-page CVs for new administrators (Butzer, Pilat) and faculty (Richards, Cavieres);
• Revised NAAB SPC Matrix for B.Arch and M.Arch programs reflecting 2015 criteria;
• New syllabus ARCH 2463/5463 – Methods IV: Resilient and Sustainable Systems I;
• New syllabus for ARCH 4563/5563 – Methods V: Resilient and Sustainable Systems II;
• New syllabus for ARCH 3356 – Design V – Architectural Making I
• New syllabus for ARCH 4756/5536 – Design Studio 7: Systems and Context.
November 26, 2017

Ellen S. Cathey, Associate Director
The National Architectural Accrediting Board (NAAB)
1101 Connecticut Avenue, NW
Suite 410
Washington D.C. 20036

RE: Request to update Annual Statistical Reports

Dear Ms. Cathey,

I write to request permission to correct errors in previous Annual Statistical Reports for the University of Oklahoma. As noted in the 2015 Visiting Team Report (VTR), “The Annual Reports available through the NAAB website and through the APR include the statistical information (which, as described above, contained errors and omissions).” In response to this assessment, we have reviewed the errors included in all Annual Reports available on the website since 2010. In what follows, we offer corrections to these errors. Moreover, we request permission to update the website entries to reflect these corrections. The 2015 VTR also noted that the 2011 NAAB Response, the 2012 Focused Evaluation Report, and the 2012 OU Response were not available on the NAAB website. We have these documents and request permission to upload them to the NAAB website. Finally the 2015 VTR referenced inaccuracies “regarding faculty education, faculty salaries, and student demographics.” However, we were unable to identify all such inaccuracies; we found only one relevant inaccuracy in the 2014 faculty education category, for which we offer corrections below. We kindly request more information on these so that we may offer corrections as needed.

The majority of errors in previous reports relate to questions about online degree offerings and articulation agreements with local community colleges. We do not offer our degrees online and we do not have any articulation agreements with local community colleges. Thus the answers to the following questions pertaining to these two issues are consistent for all years. These are included in Part I below. The second issue identified in the Annual Reports was related to the faculty data in the 2014 Annual Statistical Report. Some of the faculty data related to rank, gender, degrees, registration was missing. These are included in Part II below.

Please let me know if you have any further questions about our Annual Statistical Reports.

Best,

Stephanie Pilat, Ph.D., FAAR '07, Associate AIA
Director of the Division of Architecture
Associate Professor
University of Oklahoma College of Architecture
I. ANNUAL STATISTICAL REPORT GENERAL UPDATES FROM 2010 – 2015:

SECTION B - M.ARCH:
Can the degree be completed online? NO.
Percentage of classes offered: ZERO.
Can the degree be completed online? NO.
Online Classes List: NOT APPLICABLE.
Online Classes List: NOT APPLICABLE.
Does the articulation agreement include the B.Arch degree program? NOT APPLICABLE.
Does the architecture program have articulation agreements with local community colleges? NO.
Percentage of classes offered: ZERO.

SECTION F - B.ARCH:
Program Offered Online: NO.

II. 2014 FACULTY DATA ON DEGREES AND REGISTRATION

SECTION G

2014 Faculty Credentials:

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</table>
CURRICULUM VITAE

Hans E. Butzer, Architect, AIA, AK NW, LEED AP
Dean and A. Blaine Imel, Jr. Professor of Architecture and Urban Design
Mabrey Presidential Professor | The University of Oklahoma College of Architecture
Principal | Butzer Architects and Urbanism

Offices:
The University of Oklahoma College of Architecture
830 Van Vleet Oval
Gould Hall, Room 198
Norman, OK 73019-0265

Butzer Architects and Urbanism
SLIVR @ 718 W. Sheridan Ave
Oklahoma City, OK 73102

Education: 1999
Harvard University Graduate School of Design, Cambridge, MA
Master of Architecture II, post-professional degree

1990
University of Texas at Austin, Austin, TX
Bachelor of Architecture, first professional degree, with high honors

Professional Licenses
Architekten Kammer Nordrhein Westfalen (AK NW), Licensed Architect in Germany, Nr. A 38478
Oklahoma State Board of Architects, OK Architect Nr. A5887
U.S. Green Building Council, LEED BD+C Accredited Professional

Select University Teaching:
2017-present
University of Oklahoma, Norman, OK: Dean, College of Architecture

2016-2017
University of Oklahoma, Norman, OK: Interim Dean, College of Architecture

2013-2016
University of Oklahoma, Norman, OK: Division Director, Full Professor

2006-2012
University of Oklahoma, Norman, OK: Associate Professor of Architecture and Urban Design
Design studios; lectures and seminars; thesis committees; Bruce Goff Chair Committee

2010
Mabrey Presidential Professorship: University recognition for exceptional cross-pollination between teaching and practice

2000-2006
University of Oklahoma, Norman, OK: Assistant Professor of Architecture and Urban Design
Design studios; lectures and seminars; thesis committees; Bruce Goff Chair Committee Chairman

Select Community Action Projects:
2014-2016
Tecumseh Middle School, “April 19th, 1995 Memorial”, in collaboration with the TMS Student Council, The University of Oklahoma Division of Landscape Architecture and Allied Professionals

Home 4 Vets, “Affordable Housing for Veterans”, OKC, in collaboration with Mr. Howard Bridges

2012-2013
Arts District Urban Infill Studio, OKC, OK, in collaboration with the OKC Department of Planning

2011-2012
Park and Power District Studio, OKC, OK, master plan of 10 city blocks east of the OKC MAPS Downtown Park, in collaboration with the OKC Urban Renewal Authority and the OKC Department of Planning

2009-2010
COX Convention Center Site Redevelopment Studio, visionary mixed-use proposal, OKC, OK, in collaboration with the OKC Department of Planning

2007-2008
MAPS3 Mega Projects Studio, Site and Design Proposals for a new Multi-modal Hub at Santa Fe Station, Convention Center, Sports Arena and Convention Hotel, OKC, OK, in collaboration with the OKC Department of Planning, Greater Oklahoma City Chamber of Commerce, and Downtown OKC INC

2006
E.K. Gaylord Re-alignment and Development, OKC, OK, proposal in collaboration with Blair Humphreys

2005-2006
Downtown to the River Master Plan Studio, OKC, OK, 180 acre redevelopment master plan including a contiguous linear park connecting the city core to the river via the Harvey Avenue right-of-way, in collaboration with the OKC Department of Planning

2004-2005
MAPS for KIDS Downtown Elementary School Studio, OKC, OK, feasibility study and design for school at four potential downtown locations, in collaboration with OKC Public Schools and the OKC Department of Public Works

Select Awards and Honors:
2016
American Institute of Architects National Award: Thomas Jefferson Award for Public Architecture; awarded at the National AIA Convention in Philadelphia, PA

American Institute of Architects Oklahoma: Outstanding Educational Contributions Award; awarded at the AIA Oklahoma Convention in Stillwater, OK

2015
American Institute of Architects Merit Award: AIA Central States Region, with Butzer Gardner Architects for the Classen Residence, Oklahoma City

Thrivist.com: The 11 Most Stunning New Architecture Projects in America (OKC SkyDance Bridge)

Design Intelligence: 30 Most Admired Architectural Educators

Hans E. Butzer
Professor of Architecture and Urban Design
T: 405.325.3505
C: 405.503.7342
F: 405.325.7558
E: butzer@ou.edu
Stephanie Zeier Pilat, Ph.D., FAAR ’07
1625 Crestmont Ave. Norman, OK 73069
stephaniepilat@icloud.com I 405-537-0140

ACADEMIC APPOINTMENTS

University of Oklahoma:
   Director of the Division of Architecture and Associate Professor I 2016–present.
   Associate Director of the Division of Architecture I 2014–16
   Assistant Professor of Architecture I 2010–16

EDUCATION

University of Michigan, Ph.D. in Architectural History and Theory, 2009.
University of Michigan, Medieval and Early Modern Studies Graduate Certificate, 2009.
University of Michigan, Master of Sciences in Architectural History and Theory, 2002.
University of Cincinnati, Bachelor of Architecture, 1999.

SELECTED PUBLICATIONS

Janet Ward and Stephanie Pilat, editors, “Terror Trauma, Memory: Special Issue Dedicated to the Oklahoma City Bombing,” Social Science Quarterly, vol. 97, issue 1 (March 2016).


EXTERNAL FELLOWSHIPS, GRANTS, AND AWARDS

Named as one of the “30 Most Admired Educators for 2015” by Design Intelligence.

Wolfsonian-FIU Residency Fellowship, Spring of 2014.

American Fellowship from the American Association of University Women, 2013-14.

American Academy in Rome, Donald and Maria Cox Pre-Doctoral Rome Prize Fellow in Modern Italian Studies, 2006-7. The Rome Prize provided for a monthly stipend, room, and board for a year-long residency in Rome.

Fulbright Graduate Student Fellowship to Italy, 2005-6. This fellowship provided funding to support a year-long residency in Rome.
Education

2006 - 2009 Columbia University GSAPP, New York City, New York
M.Arch
Recognition: studio work published in Abstract
Fellowship: William Kinne Fellows Memorial Traveling Prize

2002 - 2006 The University of Michigan TCAUP, Ann Arbor, Michigan
B.S. Architecture
Honors: AIA student show Award, Academic Scholarship, student shows invitation

Academic Positions

Fall 2017 Assistant Professor at The University of Oklahoma College of Architecture
2014 - 2017 Adjunct Professor at The University of Oklahoma College of Architecture.
Classes taught include studio design at multiple year levels and digital fabrication.
2016-2017 Award: Outstanding Adjunct Award
2016 Spring Recognition: Bruce Goff Chair of Creative Architecture Appointment
2016 Spring Lecture: Bruce Goff Chair of Creative Architecture Lecture
2015 - 2017 Service: Curriculum Committee, Graduate Student Admissions Committee

Research & Publications

2016 Placemaking Toolset, Project Proposal for ArtPlace America National Creative Placemaking Fund, Oklahoma City, Oklahoma
The University of Oklahoma is the lead applicant, Deborah Richards is the Primary Investigator
The University of Oklahoma team members: Chris Weaver, Hans Butzer
Project partners: CTP, Ana Castellanos, OKC SNI, Inclusion in Art, Oklahoma Contemporary.
Recognition: Placemaking Toolset was a finalist project to be considered for funding. 80 finalist projects represent 6% of the initial 1,361 applications from projects located around the country.

Professional Registrations / Certifications

Registered Architect in New York & Oklahoma. Member of AIA, NCARB, ULI
Award: AIA Oklahoma Young Professional Achievement Honor Award, 2016

Professional Practice

Present Inter-Projects Architecture, PLLC, Oklahoma City & New York City
Deborah Richards founding principal, firm partner Zachary Colbert
Selected Current Projects:
21st St Offices, 2,000sf office space renovation, Oklahoma City, OK
PPGP: 11,000sf healthcare center & offices tenant build out, Oklahoma City, OK
Sparrow Park House: 2,500sf house, Oklahoma City, OK
Venue 102: 4,000sf event space, Edmond, OK

Selected Completed Projects:
Scottie's Deli: 2,000 sf restaurant tenant build out, Oklahoma City, OK
Mosaic Home: 4,000sf apartment gut renovation, New York City, NY.
Martin Residence: 3,000sf house renovation, Oklahoma City, OK
World War I Memorial: Pershing Park renovation & memorial, Washington D.C. Concept design
325 Pond Lane: 1,700sf house, Lakeville, MA
Published: Design New England, “Gathering Place,” Gail Ravgiala, January 2014

Previous Prior to founding her own firm, Deborah has worked at the offices of Fitzsimmons Architects in Oklahoma City,
WORKac in New York City, Urbanus Architecture and Design in Beijing, The Living in New York City, Leeser
Architecture in New York City.
CONTACT INFORMATION

Andrés Cavieres
Assistant Professor
College of Architecture
University of Oklahoma
andres.cavieres@ou.edu

EDUCATION

2018  Ph.D. in Architecture, Georgia Institute of Technology (expected)
2002  Professional degree in Architecture, Universidad de Chile
2000  Bachelor of Architecture, Universidad de Chile

FUNDED RESEARCH


PATENTS

2017  Mounting Clips for Panel Installation. US 9705447 B2
2017  Mounting Clips for Panel Installation. US 9571031 B2

PUBLICATIONS


### Realm A: Critical Thinking and Representation

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### Appendix 7

- Ability
- Understanding
- Introduction to the material
## M. ARCH DivA REQUIRED ARCHITECTURE COURSES and 2014 NAAB STUDENT PERFORMANCE CRITERIA MATRIX

### NAA\(s\) STUDENT PERFORMANCE CRITERIA / COURSES

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### Introduction to the material

**M. ARCH DivA Required Architecture Courses**

- **D. ARCH G6566 - DESIGN I - GRAD ARCHITECTURAL (summer)**
- **M. ARCH 2363/G563 - M III - MATERIALS AND FORM**
- **H. ARCH G543 - ARCHITECTURAL HISTORY**
- **D. ARCH 2366/G566 - DESIGN III - CRAFTING PLACE**
- **M. ARCH 2463/G5463 - M IV - SUSTAINABLE AND RESILIENT SYSTEMS I**
- **S. ARCH 4133/G533 - ARCHITECTURAL STRUCTURES I**
- **M. ARCH 4663/G5663 - M VI - SUSTAINABLE AND RESILIENT SYSTEMS II**
- **H. ARCH 4453/G5453 - MODERN & CONTEMPORARY ARCHITECTURE**
- **S. ARCH 4333/G533 - ARCHITECTURAL STRUCTURES II**
- **M. ARCH 4633/G543 - ARCHITECTURAL THEORY AND CRITICISM**
- **H. ARCH 4533/G543 - ARCHITECTURAL THEORY AND CRITICISM**
- **M. ARCH 4733/G533 - M VII - ADVANCED SYSTEMS**
- **D. ARCH 4753/G536 - DESIGN VII - SYSTEMS AND CONTEXT**
- **S. ARCH 4833/G533 - ADVANCED STRUCTURES**
- **M. ARCH 4863 - M VIII - BUILDING PERFORMANCE ANALYTICS**
- **D. ARCH 4856 - GRADUATE ARCHITECTURAL DESIGN IV**
- **H. ARCH G543 - ARCHITECTURAL THEORY AND CRITICISM**
- **R. ARCH G5920 - PROFESSIONAL PROJECT RESEARCH**

### Appendix 8

**M. ARCH G592 - M IX - ENTREPRENEURIAL ARCHITECT & LEADERSHIP**

- **D. ARCH G6566 - DESIGN IX - COMPREHENSIVE DESIGN I**

- **M. ARCH G593 - M X - TOOLS OF PRACTICE**

- **D. ARCH G6566 - DESIGN X - COMPREHENSIVE DESIGN II**
ARCH 2463/ARCH 5463 – Methods IV - Resilient and Sustainable Systems I  
COLLEGE OF ARCHITECTURE – University of Oklahoma  
FITHIAN – Spring 2017

T/Th, 10:30-11:45 GH 155

Lee A. Fithian, AIA, AICP, LEED AP, GAC  
Associate Professor, Division of Architecture  
leefithian@ou.edu  
Office Hours MTWR 1pm-2pm and by Appointment, GH 267

COURSE DESCRIPTION
This course is the first of two systems courses necessary to a professional NAAB accredited program in Architecture. The first course, Methods IV – is approached in two parts. The first portion of this course provides an introduction to the study and impact of exterior environmental factors on building systems, an overview of building site selection criteria, daylighting, water issues and preliminary calculation methods. The second portion of the course is the systems use of materials in architectural design including energy efficiency, life safety and noise control.

The course will reintroduce students to the scientific method and how it applies to design analysis. We will also on occasion utilize the Socratic Method of inquiry to answer questions that arise during presentations. The Socratic Method is defined as follows:

“A pedagogical technique in which a the teacher does not give information directly but instead asks a series of questions, with the result that the student comes either to the desired knowledge by answering the questions or to a deeper awareness of the limits of knowledge”


The course will utilize a wide variety of computer-based applications available for making design decisions. Case studies will be used to clarify information presented. Laptops, smartphones, tablets are required with skill development in the acquisition, installation and evaluation of software used for sustainable design analysis.

By the end of the course, students will demonstrate the ability to understand the fundamentals of site, wind, daylighting, materials and their impact upon building form. Students will be able to understand the relationships of these systems to concepts of resilient and sustainable design, and their effect on building form. Students will apply codes and standards that effect building design including energy efficiency.

COURSE LEARNING OBJECTIVES
• To critically contribute to the development of environmentally responsible architecture.
• To learn, understand, and apply software tools for analyzing and optimizing systems in resilient and sustainable buildings.
• To recognize and understand energy efficiency problems in existing buildings and design system modifications with greater efficiencies, working toward the net-zero integrated response.
• To understand water issues and how the built environment can contribute to mitigating these issues
NAAB STUDENT PERFORMANCE CRITERIA
This course intends to fulfill the following student performance criteria from the 2009/2015 NAAB Conditions for Accreditation during the semester:

• I.1.4 Stewardship of the Environment
  Sustainability (2009 B3): Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.

• B. 6 Environmental Systems: Ability to demonstrate the principles of environmental systems design, how design criteria can vary by geographic region, and the tools used for performance assessment. This demonstration must include active and passive heating and cooling, solar geometry, daylighting, natural ventilation, indoor air quality, solar systems, lighting systems, and acoustics.

• B. 7 Building Envelope Systems and Assemblies: Understanding of the basic principles involved in the appropriate selection and application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.

• B. 9 Building Service Systems: Understanding of the basic principles and appropriate application and performance of building service systems, including lighting, mechanical, plumbing, electrical, communication, vertical transportation, security and fire protection systems.

REQUIRED TEXT
• Various readings as assigned will be available on the class D2L (learn.ou.edu) site

REQUIRED SOFTWARE
• Multiple software as assigned and downloaded, or available in labs, Laptop REQUIRED

CLASS COMMUNICATION
Desire2Learn and your university email address will be the communication tools utilized for this class. Students are responsible for checking D2L regularly. Assignments, changes to the course schedule, and other relevant information will be posted there and this will be the primary means for communicating these types of information.

RESOURCES
The College provides students with access to computer labs, laser cutters, and a Lighting Lab located in Gould Hall and a digital fabrication and model shop located at 1425 George Ave. Students are required to complete safety training before using any equipment in the Model Shop. Students wishing to use the laser cutters are required to obtain additional training. Contact the Model Shop to arrange safety training. The safety manual is available at http://modelshop.coa.ou.edu/06web-safety-manual.pdf.
COURSE GRADING, GUIDELINES, AND EVALUATION

Unless otherwise indicated (RATs), students are to complete the course requirements as individuals. Any indication that students are doing otherwise will result in the maximum ramifications as allowed by University Policy. In the case of group assignments, all members are expected to contribute to their best potential. Unless stated otherwise, a single copy of the completed assignment, with the names of the group members on the cover sheet, will suffice. The instructor retains the right to have group members grade the performance of all of the other members of their group.

Work for the semester will be based upon the scale outlined below. If any student wishes to protest a grade, a request for review must be made within one week of its issuance, after which no grade revision will be considered. It is up to the student to request interim evaluations from the instructor if you are concerned about your progress. Individual writing assignments will be evaluated on a numerical basis as follows:

90-100   A: Student’s work is original and of exceptional intellectual quality, is very well written and graphically superior, is supported by wide textual documentation, is structurally inventive, and is complete.

80-89    B: Student’s work is of high intellectual quality, is well written and graphically well presented, is supported by textual documentation, progresses logically, and is complete.

70-79    C: Student’s work is of average intellectual quality, is written intelligibly and graphically succinct, is supported by some textual documentation, progresses logically, and is complete.

60-69    D: Student’s work is of below average intellectual quality, is written poorly and graphically inferior, is not adequately supported by textual documentation, progresses illogically, and/or is incomplete.

0-59     F: Student’s work is of unacceptable intellectual quality, badly written and graphically poor, unsupported, illogical, and/or incomplete.

ASSIGNMENT WEIGHT

• 10% Discussion and participation during class
• 10% Readiness Assessment Tests (RATS) – What’s a RAT?! A RAT is a Readiness Assessment Test. These are pop-quizzes that will be given first individually and then immediately thereafter given to the study team at the start of class. Each individual quiz and study team quiz will be averaged to produce the individual’s RAT score for that quiz.
• 30% Assignments – accuracy of design analysis, format and grammar of writing. Unless otherwise noted, assignments are due to D2L at the beginning of class and must be turned in before the Dropbox closes.
  o Late assignments will receive a penalty of 25% per class period. Assignments that do not have the approval of the GRG by the DUE date will be counted as late until approval is obtained.
• 10% Midterm Exam
• 40% Final Project (Graded by Faculty and GRG)
  o 50% Graphic Presentation (PPT)
  o 50% Final Discussion Essay
ATTENDANCE POLICY
Regular formal and informal interaction with faculty and peers during scheduled class time is key to a successful teaching and learning process in a professional program. Full course participation by all students is the normal expectation of our program in Architecture. This participation will be reflected in factors such as regular class and studio attendance, active participation in class discussions and reviews, relationship of the development of project work with the studio, and positive interaction with faculty and classmates. It is essential that you come to class prepared to display and discuss your ideas since each meeting with your instructor(s) will be evaluated in terms of your preparedness and then there are the RATs. In addition, arriving on time and staying the entire period is assumed unless the absence is excused or special permission for the absence is granted in advance. Failure to meet these requirements for course participation will result in a reduced grade. Two (2) unexcused absences shall result in the semester grade being lowered one (1) letter grade. Three (3) unexcused absences shall result in the semester grade being lowered two (2) letter grades. All absences must be documented.

GRADUATE RESEARCH GUIDE
This course includes the support of a Graduate Research Guide (GRG). The GRG serves as an active coach and mentor for you and your research skill development. The GRG is will not do the work for you, there is also a separate GA for grading for this course. Your study groups are intended to help you solve problems and use the software. Each person will be required to have the Graduate Research Guide review and then sign off on the final version of EACH assignment (6) including the Final to have the submission count toward your grade. Each person will contact and set up independent meeting times with the GRG for each assignment and the final. There will be no exceptions to this rule.

<table>
<thead>
<tr>
<th>Spring 2017 Schedule</th>
<th>Methods IV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td>17-Jan</td>
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<tr>
<td><strong>Week 2</strong></td>
<td>23-Jan</td>
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<td><strong>Week 3</strong></td>
<td>30-Jan</td>
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<td><strong>Week 4</strong></td>
<td>6-Feb</td>
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<td><strong>Week 5</strong></td>
<td>13-Feb</td>
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<td><strong>Week 6</strong></td>
<td>20-Feb</td>
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<tr>
<td><strong>Week 7</strong></td>
<td>27-Feb</td>
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<tr>
<td><strong>Week 8</strong></td>
<td>6-Mar</td>
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<td><strong>Week 9</strong></td>
<td>13-Mar</td>
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<td><strong>Week 10</strong></td>
<td>20-Mar</td>
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<td><strong>Week 11</strong></td>
<td>27-Mar</td>
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<td><strong>Week 12</strong></td>
<td>3-Apr</td>
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<tr>
<td><strong>Week 13</strong></td>
<td>10-Apr</td>
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<td><strong>Week 14</strong></td>
<td>17-Apr</td>
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<tr>
<td><strong>Week 15</strong></td>
<td>24-Apr</td>
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<tr>
<td><strong>Week 16</strong></td>
<td>1-May</td>
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<tr>
<td><strong>Week 17</strong></td>
<td>9-May</td>
</tr>
</tbody>
</table>
ASSIGNMENTS OVERVIEW
Each assignment must be a PDF submittal on D2L. Include text that explains the application to your project, emphasizing the meaning of the outputs and not just how a software tool showed a particular strategy to be preferable. Provide all graphics necessary to make this a standalone document in support of your studio project. The tool graphic output MUST support your design strategies and decisions. Each assignment will have a rubric, and due date when the assignment is given.

1. **Climate Consultant Software** - Psychrometric Chart, Heating Degree Days, Cooling Degree Days, Temperature, and Humidity for each season. Identify the top three passive strategies YOU would use and include narrative of how they apply to the design selected.

2. **Site plan with wind roses** Use the wind roses from Climate Consultant appropriate for each season’s natural ventilation and optimized for temperature and humidity of the heating (2) and cooling (2) season as identified in Assignment #1. Coordinate with any studio site analyses you might have produced.

3. **VELUX Visualizer 2 Software**—graphic output of major rooms showing daylighting solution with sufficient Daylighting Factor on work surfaces. On the site plan show building orientation to maximize daylighting. Show all studies as you optimize for maximum daylight factor.

4. **Internal Ventilation Illustration** – Graphics output using the same rooms as used in Assignment #2 and #3, use WTunnel Pro App, and do not use “magic arrows”, show all studies as you optimize for natural ventilation. NOTE: You will have to synthesize and optimize the final orientation of the building reconciling ventilation and daylighting as well as site concerns.

5. **Rainfall available for building use AND storage calculations** to meet most or all of building needs – Output charts to PDF with narrative. Include on Site plan rainfall storage locations.


FINAL
Your FINAL will be:

1. **PPT** - to support a 5 minute presentation of your combined design analysis assignments (1-6) revised to reflect your final changes to your studio project. The PPT should be visual and tell the story of your analyses and their impact on the design. This should be a standalone presentation and should tell the story of your semester’s work.

2. **FINAL DISCUSSION ESSAY** – In clear, concise terms, with a minimum of 2000 words, write a reflective assessment of your design process, pay close attention to how you have adopted and integrated the graphically based analytical tools introduced in the course and how your design process was altered to include your new skill sets. **Submission must be in DOC format.**

GRADUATE STUDENTS –ADDITIONAL REQUIREMENTS
Graduate students are required to present their assignments and their final project to the class. Students will be randomly selected and will present the day after the assignment is due.
SCIENTIFIC METHOD
What is the scientific method as it applies to design analysis? The scientific method is a process for experimentation that is used to explore observations and answer questions. Does this mean all architects—who are also scientists—exactly follow this process? No, but even when modified, the goal remains the same: to discover cause and effect relationships by asking questions, carefully gathering and examining the evidence, and seeing if all the available information can be combined in to a logical answer.

Even though this graphic shows the scientific method as a series of steps, keep in mind that new information or thinking might cause you to back up and repeat steps at any point during the process. A process like the scientific method that involves such backing up and repeating is called an iterative process and that is exactly how the design process works.

Figure 1: http://www.sciencebuddies.org/science-fair-projects/project_scientific_method.shtml
UNIVERSITY OF OKLAHOMA POLICIES
http://catalog.ou.edu/current/Policies.htm

WRITING CENTER
The Writing Center here at OU is an important resource. You will soon learn, and early in your career, the importance of good communication. The instructors at the Writing Center will be glad to talk to you about your writing, and for any course you may be taking. They are available for appointment, either online or by phone, or you can drop in anytime they are open. Please familiarize yourself with their website: http://www.ou.edu/writingcenter

ACADEMIC DISHONESTY
Plagiarism is severely punished at OU and all Universities. This problem has become exacerbated by the extensive outreach of the Internet. It is possible to obtain voluminous information on any subject, and a temptation for many students to “lift” entire paragraphs or entire essays from the web PARTICULARLY WHEN PRESSURED FOR TIME. Please make it a practice to cite all references using Chicago Style, and never present anyone else’s work as your own. Further clarification on the University policy is available at http://integrity.ou.edu/

ACADEMIC CALENDAR
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RESTRICTIONS DURING DEAD WEEK
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STUDENT RESPONSIBILITIES AND HANDBOOKS
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COLLEGE OF ARCHITECTURE POLICIES
PROFESSIONAL WORK ENVIRONMENT
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ARCH 4563/ARCH 5563 – Methods V – Sustainable and Resilient Systems  
COLLEGE OF ARCHITECTURE – University of Oklahoma  
FITHIAN  
FALL 2017

T/Th, 4:30-5:45 DAH, Room 103  
FINAL Friday December 15, 2017 4:30-5:30PM

Lee A. Fithian, AIA, AICP, LEED AP, GAC  
Associate Professor, Division of Architecture  leefithian@ou.edu  
Office Hours M 10am-12pm and by Appointment, GH 267

COURSE DESCRIPTION
This course provides an introduction to active forms of thermal control, lighting, acoustics, egress, conveyance systems, plumbing and electrical systems, and the effects these systems have on buildings including life safety. Studying the impact of exterior environmental factors on HVAC and lighting systems, an overview of systems selection criteria, preliminary calculation methods, and the implication of engineering principles on architectural design is provided.

Students will demonstrate the ability to identify HVAC and electrical systems and controls, understand acoustical applications and terminology, and understand the fundamentals of lighting/daylighting and their impact upon building systems. Students will be able to understand the relationships of these systems to concepts of sustainable design. Students will continue to address life-safety issues and be introduced to additional Codes and standards that effect building design.

The course will utilize a selected set of computer-based applications available for making system design decisions. Case studies will be used to clarify information presented.

COURSE INTRODUCTION
This course that will help students better understand how systems design and sustainability can be quantitatively assessed and integrated into the architectural design process. The role of the architect, and their coordinating role in systems design and sustainability, will be explored. Each session will be followed by case study reviews to help the student assimilate and apply the information learned. Case studies will be reviewed individually and with assigned teams.

LEARNING OBJECTIVES
- To critically contribute to the development of environmentally responsible architecture.
- To learn, understand, and apply tools for analyzing and optimizing systems in sustainable buildings.
- To recognize and understand energy efficiency problems in existing buildings and design system modifications with greater efficiencies, working toward the net-zero integrated response.
- To produce a comprehensive analysis of high-performance/net-zero architectural projects
- To understand water and energy issues and how the built environment can contribute to mitigating the increasing lack of these resources

NAAB STUDENT PERFORMANCE CRITERIA
This course intends to fulfill the following student performance criteria from the 2009/2015 NAAB Conditions for Accreditation during the semester:
- I.1.4 Stewardship of the Environment
- Sustainability (2009 B3): Ability to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design,
bioclimatic design, and energy efficiency.

- **B. 6** Environmental Systems: *Ability* to demonstrate the principles of environmental systems design, how design criteria can vary by geographic region, and the tools used for performance assessment. This demonstration must include active and passive heating and cooling, solar geometry, daylighting, natural ventilation, indoor air quality, solar systems, lighting systems, and acoustics.
- **B. 7** Building Envelope Systems and Assemblies: *Understanding* of the basic principles involved in the appropriate selection and application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.
- **B. 9** Building Service Systems: *Understanding* of the basic principles and appropriate application and performance of building service systems, including lighting, mechanical, plumbing, electrical, communication, vertical transportation, security and fire protection systems.

**REQUIRED TEXT**
- Various readings as assigned will be available on the class CANVAS site

**Required Software**
- Multiple software as assigned and downloaded, or available in labs, Laptop REQUIRED

**REQUIRED REFERENCES**
- The Architect's Studio Companion, latest edition

**CLASS COMMUNICATION**
CANVAS and your university email address will be the communication tools utilized for this class. Students are responsible for checking CANVAS regularly. Assignments, changes to the course schedule, and other relevant information will be posted there and this will be the primary means for communicating these types of information.

**RESOURCES**
The College provides students with access to computer labs, laser cutters, and a Lighting Lab located in Gould Hall and a digital fabrication and model shop located at 1425 George Ave. Students are required to complete safety training before using any equipment in the Model Shop. Students wishing to use the laser cutters are required to obtain additional training. Contact the Model Shop to arrange safety training. The safety manual is available at [http://modelshop.coa.ou.edu/06web-safety-manual.pdf](http://modelshop.coa.ou.edu/06web-safety-manual.pdf).
**COURSE PRESENTATIONS, GUIDELINES, AND EVALUATION**

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<th>Grade</th>
<th>Description</th>
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<tbody>
<tr>
<td>90-100</td>
<td>A</td>
<td>Student’s work is original and of exceptional intellectual quality, is very well written and graphically superior, is supported by wide textual documentation, is structurally inventive, and is complete.</td>
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<tr>
<td>80-89</td>
<td>B</td>
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<td>D</td>
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</tr>
<tr>
<td>0-59</td>
<td>F</td>
<td>Student’s work is of unacceptable intellectual quality, badly written and graphically poor, unsupported, illogical, and/or incomplete.</td>
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</table>
ASSIGNMENT WEIGHT:
- 60% Daily work, discussion, homework, and participation during class
- MidTerm Exam (20% of overall grade)
- Final Exam (20% of overall grade)

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**DIVISION OF ARCHITECTURE POLICIES LAPTOP POLICY**

Students with a major in the College of Architecture are required to have a laptop computer. Laptop technologies are used to enhance the learning experience, and using a computer should be second nature to all of our students.

**DIGITAL PROJECT SUBMISSION POLICY**

In addition to the project specific submission requirements, all projects must be submitted in pdf and jpg files to your professor. Work submitted must contain the final presentation (i.e. ppt, boards, pictures of models, written documents) and process work. All models must be photographed and included in these files. File titles must include student name, class with section, semester, and project name. No student will receive a final grade without all project submissions.

| SCHEDULE - ARCH 4563/ARCH 5563 – Methods V – SUSTAINABLE AND RESILIENT SYSTEMS |
|----------------------------------|----------------------------------|
| WEEK 1                           | Introduction to class, Pre-Test, Review Comfort |
|                                 | Creation of study teams, Thermal Dynamics of Buildings |
| WEEK 2                           | Building Impacts on the Environment |
| WEEK 3                           | HVAC Systems |
| WEEK 4                           | |
| WEEK 5                           | Lighting Systems |
| **WEEK 6**                       | **CHICAGO (Field Studies)** |
| WEEK 7                           | Electrical Systems |
| WEEK 8                           | **MIDTERM** - Onsite Power/Urban MicroGrids/Resiliency |
| WEEK 9                           | Energy Calcs - eQuest and ComCheck |
| WEEK 10                          | |
| WEEK 11                          | Plumbing/Stormwater |
| WEEK 12                          | Life Safety Review and IBC, Egress and Conveyance Systems |
| WEEK 13                          | (continued) |
| WEEK 14                          | THANKSGIVING |
| WEEK 15                          | Basic Acoustics |
| WEEK 16                          | Review, Post-Test |
| **FINAL**                        | **FRIDAY DECEMBER 15, 2017 4:30-5:30 PM** |
ARCH 3556 DESIGN STUDIO 5: ARCHITECTURAL MAKING I

Fall 2017
The University of Oklahoma - College of Architecture

Time: M/W/F 1:30 – 5:30
Location: Room 0350

Instructors:
Deborah Richards | d.richards@ou.edu
Tiziana Proietti | tiziana.proietti@ou.edu

COURSE GOALS AND OBJECTIVES

Develop overall design skills including programing, concept formation, architectural language formation, model making, and representation. Students will explore relationships between the site and the building.

Course Catalog Description
Prerequisites: ARCH 2463, ARCH 2456, ARCH 2343, and ARCH 4133 with a grade of C or better. Co-requisites: ARCH 4563, ARCH 4233, ARCH 4453; or permission of director.
Introduces principles and techniques of site design within a building context of place, order, form, and structure. It also introduces climatic data analysis software as a means for teaching evidence based design and sustainable design principles. Studio-based lectures and assignments will challenge students to analyze, adapt to, and transform the site within a building design context. (F)

NAAB Criteria:
This course meets the following performance criteria from the 2014 NAAB Conditions for Accreditation during the semester. For the current conditions and procedures visit: http://www.naab.org/accreditation/program-resources/current-conditions-and-procedures/

PART TWO (II): SECTION 1—STUDENT PERFORMANCE—EDUCATIONAL REALMS AND STUDENT PERFORMANCE CRITERIA

The accredited degree program must demonstrate that each graduate possesses the knowledge and skills defined by the criteria below. The knowledge and skills defined here represent those required to prepare graduates for the path to internship, examination, and licensure and to engage in related fields. The program must provide student work as evidence that its graduates have satisfied each criterion.

The criteria encompass two levels of accomplishment:

Understanding - The capacity to classify, compare, summarize, explain, and/or interpret information.

Ability - Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.

Students will be introduced to the following NAAB criteria:
B.3 Codes and Regulations
C.3 Integrative Design

**Students will demonstrate understanding in regards to the following:**
C.1 Research

**Students will demonstrate ability in regards to the following:**
A.2 Design Thinking Skills
A.3 Investigative Skills
A.4 Architectural Design Skills
A.6 Use of Precedents
B.1 Pre-Design
B.2 Site Design

**Required Texts, Codes, Materials, and Tools:**
- Short Readings will be posted on Canvas
- Laptop with the following software: Rhino on Windows, adobe illustrator, adobe photoshop, adobe indesign, Vray or Maxwell for Rhino.
- All materials necessary to execute models required in assignments

**Recommended Texts, Materials, and Tools:**
- Clamp light (highly recommended.)
- Large monitor to plug your laptop into, and a cable lock.

**Assignments and Grading**
There are two main assignments this semester: 1) Objects & Field Conditions, 2) Final Building Project

Professionalism and work process  10%
Project I  25%
Project II  65%
TOTAL  100%

You will be evaluated according to the following criteria:
Assignment objectives. Each assignment will have a list of objectives upon which you will be graded. The assignment objectives will often revolve around experimentation and developing your concept (through diagrams, form, structure, systems, details, etc.)
Completion of Assignment. Each assignment will have a list of deliverables which you must complete by a specified due date.
Craft. You will be graded on the craft of your deliverables.
DIVISION OF ARCHITECTURE STUDIO POLICIES

Studio Pedagogy and Practices:
The main pedagogical goal of design studio is to prepare students to become better designers in the broadest sense. That objective requires the development of two sets of skills: critical design thinking and representational craft. These sets of skills are intrinsically related, and therefore need to be developed concurrently. Studies in the areas of Cognitive Science and Design Cognition demonstrate the fundamental role that external representations (i.e. models and prototypes) play in the development of critical thinking, innovation, and creativity. Research suggests that the development of critical thinking in design is:

1) Situated: We learn it by doing, and by doing several times.
2) Grounded: Critical thinking relies on the use of multiple representations, both internal and external.
3) Distributed: It emerges from the interaction with physical, social, and organizational environments.

These observations motivate the OU design studio pedagogy, in which the students learn by:

- Research into precedent projects, case studies, and existing bodies of knowledge
- Intensively exploring and evaluating design alternatives
- Using multiple forms of representation (models, drawings, writing, etc.)
- Collaborating with peers and faculty
- Proposing their own methods (as required) given a new challenge or situation

Studios are hands-on learning classes. Your solutions to the assignments form the basis for class discussions and affect the quality of the learning experience. Special lectures, critique sessions, workshops, and additional resources will be provided to support collective and individual learning efforts. Faculty will aim to meet with each student at least every other class period.

What we expect of you:

- Work in Studio. All students are expected to work in studio where they may benefit from faculty and their peers. Students should have all required texts and materials as well as their laptop in studio every day.
- Be Prepared for every class. Come to each class with new work to share with your Professor. Be prepared for desk crits, impromptu pin-ups, and peer reviews every day.
- Communicate. Check your email and the Canvas site daily for class news, changes to the class schedule, cancellations, and updates.
- Attend Class and Actively Participate. Students and faculty are required to attend studio and work on studio assignments during class. Students are permitted two unexcused absences. The third unexcused absence will result in a 10% deduction from the final grade. Each subsequent absence may result in an additional full letter grade reduction. More than two excused absences requires a meeting with the course instructor to determine how to proceed and meet learning objectives.

There will be two design reviews this semester. Attendance and participation through the entire design review is mandatory. Sometimes reviews run longer than scheduled and you should plan accordingly so that you can participate for the entire
review. Any student that does not participate without an authorized excuse will fail that project. If you have an authorized excuse contact me immediately to arrange a way to makeup the review.

- **Avoid Distractions.** Studio class time is dedicated to focused work on your architectural studies. As such, any distractions such as social media, watching television/videos, texting, etc., are forbidden during class time. Turn all cell phones to vibrate, silent, or off during class. Please step out of class if you need to make or take an important call.

- **Be respectful.** Please respect your classmates’ and professors’ need for a quiet, supportive, and academic environment. Be professional in all communications with your peers and faculty. Visitors are not permitted in the design studio during class hours unless previously discussed and approved by the professor. Faculty consent is required for audio or video recordings of class lectures or discussions.

- **Maintain a Sketchbook.** You are required to keep a sketchbook for all studio courses. The sketchbook should be used to take notes during lectures and pin-ups and to document the design process including feedback from professors. The sketchbook serves as a narrative of your semester. You are encouraged to use one sketchbook to document all your courses in a given semester.

- **Document your work and maintain your portfolio.** Take photographs and/or digitally scan your work throughout the semester to ensure you have documentation of your design process. This will serve you well in your final reviews as well as in your portfolio. Compose your photographs with care, thinking about background, lighting, and visual axes. Consider how to integrate projects into your portfolio while you are working on them. Make a habit of regularly updating your portfolio at the conclusion of every project.

- **Digitally submit your work.** All project materials must be submitted in PDF and/or jpg files to your professor. Work submitted must contain the process and final presentation including but not limited to models, drawings, written narratives, etc. All models must be photographed and included in these files. Specific guidelines on how to create PDF files is available online at [http://lab.coa.ou.edu/pdf.php](http://lab.coa.ou.edu/pdf.php) File titles must include full name, course number, semester, and project name. No student will receive a final grade without the final project submission.

- **Studio Clean-up.** Students are required to attend and participate in the studio cleanup, which is held during the exam period scheduled by the University. Any student not in attendance will have their semester grade dropped by one letter.

- **Know the Studio Culture Policy.** The Studio Culture Policy is posted in each studio, the library, and is available online at: [http://www.ou.edu/content/architecture/division_of_architecture/resources/organizations 1.html](http://www.ou.edu/content/architecture/division_of_architecture/resources/organizations 1.html)

- **Be Honest.** It is imperative that no photos or text be copied or saved from the Internet unless the work is your own, you have written permission against all applicable copyright laws, or the work is public domain. If web based articles or photos are to be viewed in class, the direct website will be accessed live for discussion during class time.

- **Write about your work.** Writing is an important portion of design. You will be expected to express your design intent and process in written form throughout the semester. Keep a sketchbook with you at all times to record your thought process in drawing and writing.
• **Previous Instruction.** Your education is cumulative. You are expected to use and build upon previous instruction, understanding, and ability to date.

Field Trips and Site Visits:
We will have scheduled field trips and site visits throughout the semester. Students may incur some financial responsibility during field trips, which may include: travel, accommodations, meals, and/or incidentals.

Field trips are a privilege. You are representing OU. Trips are for students in good standing and situations where attending the trip will not be detrimental to their course grade. There will be alternative assignments for students not participating in field trips.

**COLLEGE OF ARCHITECTURE POLICIES AND RESOURCES**
For the latest College of Architecture policies visit:
http://www.ou.edu/content/architecture/about/policies.html

College of Architecture Labs and Resources
The College provides students with access to computer labs, laser cutters, a Lighting Lab located in Gould Hall, and a digital fabrication and model shop located at 1425 George Ave.

**Students are required to complete safety training before using any equipment in the C_M Lab (aka Model Shop).**
http://www.ou.edu/content/architecture/facilities/creating_makinglab.html#4

**Students wishing to use the laser cutters are required to obtain additional training.**
**Contact the Model Shop to arrange safety training.** The safety manual is available at
http://www.ou.edu/content/dam/Architecture/Forms/Safety%20Manual%2010%2012.pdf or through the shop manager.

Due to various courses needing access to the model shop throughout the semester, please use the model shop primarily for models that require the use of the shop. The shop manager is aware of the model assignments at the end of Sept mid to end of November.

**Laptop Policy**
Students with a major in the College of Architecture are required to have a laptop computer. Visit the COA and Division laptop policy:
http://www.ou.edu/content/architecture/about/policies/laptop_policy.html

For software, visit: http://www.ou.edu/ouit/

**UNIVERSITY OF OKLAHOMA POLICIES AND RESOURCES**
Information on the University of Oklahoma’s official policies is available at:
http://catalog.ou.edu/current/Policies.htm

**Reasonable Accommodation Policy**
Students requiring academic accommodation should contact the Disability Resource Center for assistance at (405) 325-3852 or TDD: (405) 325-4173. For more information please see the Disability Resource Center website http://www.ou.edu/drc/home.html! Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate your educational opportunities.
Codes, Ethics, and Policies of Behavior:
Each student should acquaint him/herself with University code, policy, and procedure related to academic misconduct, grievances, harassment and discrimination. It is highly recommended that you review the Student Conduct Code:
http://www.ou.edu/content/studentconduct/policies.html
And Student Conduct Resources: http://www.ou.edu/studentconduct/resources.html

Behavior Intervention Team:
The mission of the University of Oklahoma’s Behavior Intervention Team (BIT) is to promote student, faculty and staff success and campus safety by identifying individuals who demonstrate behaviors that may be early warning signs of possible disruptive or violent behavior and intervene at the earliest possible point. The focus of OU’s Behavior Intervention Team is care and concern for students, faculty members or staff members who may be in distress. Team members coordinate resources and implement a coordinated response with the goal of providing assistance to the individual while mitigating risk in an effort to keep the OU community healthy and safe. For more information or to file a report visit: http://www.ou.edu/normanbit/

Use of Aerosol, Paints, and other Hazardous Chemicals
Due to health and safety regulations and University policy, no spray paints, spray adhesives, and other hazardous aerosol products are allowed in the building other than the designated spray booth. Furthermore, no spray painting or use of flammable or other hazardous chemicals is allowed anywhere in the building. Use of such chemicals is a hazard to your health and safety and that of other building occupants. Spray painting and similar activities are only permissible in the approved ventilated spray booths in Gould Hall and in the Model Shop.

The Writing Center
The Writing Center here at OU is an important resource. You will soon learn, and early in your career, the importance of good communication. The instructors at the writing center will be glad to talk to you about your writing, and for any course you may be taking. They are available for appointment, either online or by phone, or you can drop in anytime they are open. Please familiarize yourself with their website: http://www.ou.edu/writingcenter.html

Academic Dishonesty
Academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. All persons involved in academic dishonesty will be disciplined in accordance with University regulations and procedures. Discipline may include suspension or expulsion from the University. Students must familiarize themselves with the University’s policy on plagiarism. The policy is available at the following link: http://integrity.ou.edu/students_guide.html

Religious Holidays
It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays. Section 3.15.2 of The Faculty Handbook

Title IX Resources and Reporting Requirement
For any concerns regarding gender-based discrimination, sexual harassment, sexual misconduct, stalking, or intimate partner violence, the University offers a variety of resources, including advocates on call 24/7. To learn more or to report an incident, please contact the Sexual Misconduct Office at 405-325-2215 (8 to 5, M-F) or OU Advocates at 405-615-0013 (24/7). Also, please be advised that a professor/GA/TA is required to report instances of sexual harassment, sexual assault, or discrimination to the Sexual Misconduct Office. For more information, please see http://www.ou.edu/eoo
Adjustments for Pregnancy/Childbirth Related Issues
Should you need modifications or adjustments to your course requirements because of documented pregnancy-related or childbirth-related issues, please contact your professor or the Institutional Equity Office. The 24-hour Reporting Hotline can be accessed by calling 844-428-6531 as soon as possible. Please see http://www.ou.edu/eoo/faqs/pregnancy-faqs.html for answers to commonly asked questions.

Academic Calendar
Students are responsible for compliance with the University of Oklahoma Academic Calendar for the current term, dates for drop/add, registration, etc.
https://www.ou.edu/content/admissions/academic_calendar.html

Pre-Finals Week
Pre-finals week will be defined as the seven calendar days before the first day of finals. Faculty may cover new course material throughout this week. Assignments or projects worth less than 10 percent combined total of a student's grade may be assigned at any time prior to pre-finals week and may be due during pre-finals week. However, no assignments or projects may be due on the last two days of pre-finals week. Quizzes may be given during pre-finals week, but cannot account for more than 3% combined total of the final grade. Exams may not be given during pre-finals week. For more information visit:
http://www.ou.edu/enrollment/final_exams.html

In the Division of Architecture, final project reviews, which constitute more than 10% of a student's grade, are typically scheduled during pre-finals week. This exception has been approved by the Division Director.

Student Handbooks
All students should familiarize themselves with the University's Student Code and student handbooks.

Visit the OU Student Handbook at: http://www.ou.edu/studentlife/studenthandbook.html

Visit the University's Student Code at:

Visit the OU Graduate Student Handbook at:
https://ou.edu/content/dam/gradweb/documents/Publications/GSHandbook2016.pdf
# COURSE SCHEDULE (SUBJECT TO CHANGE PER PROFESSORS’ DISCRETION)

## TENTATIVE SCHEDULE

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<th>Week</th>
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Food Culture

The way that we consume food and produce livestock and crops has a large impact on the health of the planet and the health of the human societies. The debate about food culture, its development, and its culture across history and time, its role in the evolution of human communities and individual life is becoming more and more significant for our planet. Our food culture drastically began to change at the turn of the 19th century due to the industrial revolution and introduction of new working machines, as well as new materials and technologies. Again, changes occurred after World War II when woman began to join the workforce in increasing numbers and there was increase in the standard of living. The idea of a “good design” affordable by all people, and the concept of international style, or better “international way to live”, have enormously affected the worldwide culture of food. In the USA the first apparition of fast food culture was linked to the effort of bringing into any kitchen affordable food, with an aesthetic conveying the idea of new, clean and futuristic; for example introducing idealistic colors to food such as the whitening process introduced to white flours or sugar. Emerging consumerism affected the way people thought of food. New diseases appeared connected to this fast paced, massed produced food culture.

The affordability of having dinner and lunch out of the home changed the culture of sharing food in the home. Additionally, in the 1950s the introduction of TV dinners and quick meals combined with an increasing workforce and long work hours made eating in the home an individual activity instead of communal one. This changed connections and relationships in our society, for better and worse.

Many other factors, not least the impact of this post-war food and lifestyle culture on the environment, has brought today’s world to reconsider the culture of food and investigate food culture by going back to its very origins and exploring again local culture and production. Slow food culture, sustainability, organic food, veganism, vegetarianism and more have appeared with the intent to give an answer to the current situation. Indeed all of them belong to the most ancient cultures.

In this studio you will design a place where people can learn about healthy eating practices, both for their bodies and for the planet, and a place where social and cultural relationships are strengthened through eating, sharing, and relaxing. You should also be able to focus on what eating means by connecting it to rituals and ceremonies developed differently from culture to culture. Food is more than nutrition for bodies. It is meant to nurture minds, senses and spirit as well. It is indeed a sensorial act that brings into any community the space of sharing. Furthermore, dishes and meals have their own aesthetics, such as the marvelous cultivated culture of the Japanese lunch box, or the ceremony of tea masters. Today the culture of cooking is growing and growing. Tv shows and series are populated of master chefs and apprentices who try to reinvent dishes, and talk about food and what it is meant to be. Why is this happening? Why is food today given so much attention? Perhaps because food is perceived as the basic, essential place for re-starting.

Your research should come from a process of awareness and self-questioning about the meaning of food for the entire planet, the individuals, and not least for the built environment, and therefore architecture. Eating and sharing food is something that equates all people around the globe. It is universal, yet local and linked to the place. Your building should be able to imagine a space where the future culture of healthy sharable food is again connected to the very basic of human nature. You can take advantage of the contact with nature and start from the common ground where all people cultivate and take their everyday food: the earth.
Site:

The site for the design studio project is a piece of loosely constructed land, partially agricultural and partially “natural”. This site has been chosen with the idea of bringing the culture of food back in contact with the natural space, its species and features. You can consider designing a space where food can be both produced and shared. This means that you should think of the outside just like the inside of the building. Nature should however remain very present and not totally occupied or subdued from the building. The site overlooks a small river. Trees and different plants populate the space. You are invited to study the place and its agricultural activity.

The site is near the end of S. Jenkins Ave., Norman OK.
Program:

1. 4,000sf Seating / Eating Area / Food Sharing
2. 2,000sf Production / Cooking/ Storing / Serving
3. 20,000sf Market, Challenge your understanding of a market and imagine a space coherent with your building concept.
4. Garden / Agriculture / Self Production / Local Food
5. “Natural” areas
6. Parking: 6 + 1 per 200 sq. ft (storage, kitchen & toilet not included in square footage)
7. Note: the programmatic areas do not need to be separated, think about the type of food that will be shared at the site, what is the appropriate relationship between the different areas of the program?
ARCH 4756 / 5536 DESIGN STUDIO 7: SYSTEMS AND CONTEXT
The University of Oklahoma – College of Architecture – Fall 2017

Gould Hall B50: Monday Wednesday, Friday 1:30 – 5:20 PM

**Daniel Butko** – AIA, NCARB, LEED AP, ASA
Associate Professor
405.325.9411 butko@ou.edu
M W 10:00 – 11:00 AM, Gould 265

**Michael Höffner** – AIA
Instructor
405.625.2131 Michael.E.Hoffner-1@ou.edu
M W F 10:30-11:30 AM, Gould 289

Mahdi Afkhamiaghda m.a@ou.edu and Sara Hajirezaie hajirezaiesara@ou.edu

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**Course Catalog Description**

**ARCH 4756 Design VII – Systems and Context** Prerequisites: ARCH 4543, ARCH 4663, ARCH 3656 with a grade of C or better. Co-requisites: ARCH 4723; or permission of director. This capstone course emphasizes the relationship of schematic design to contract documents through a broad exploration of structural, mechanical, electrical, plumbing, and other buildings systems. It builds on the fundamental issues of place, order, form, structure, site and programming. It is also dedicated to developing interdisciplinary and collaborative skills through team-based projects and other small group exercises. (F) [V]

**ARCH 5536 – Graduate Architectural Design III.** Prerequisite: Program admission or permission of graduate liaison. Emphasis is on the relationship of schematic design to contract documents in order to understand structural, mechanical, electrical, plumbing, and other systems within buildings. Students demonstrate an understanding of drafting conventions, the production of traditional contract documents, Building Information Modeling, and the communication of additional solutions necessary for construction. A major component of the course is dedicated to developing interdisciplinary and collaborative skills through team-based projects and other small group exercises.

**Goals and Additional Description**

Precedent projects and their associated programming are also explored as an influence on the overall design process. Issues related to structural systems, thermal control systems, sustainability, basic codes, life safety, site and building access/egress, vehicular relationships, and building orientation will be woven into the design process. This course will also introduce software as a means to integrate climatic conditions, building and site orientations, materials, and thermal control.
Assignments and projects continue to demonstrate a development of design vocabulary through verbal, graphic, and physical modeling communications. Graphic communication skills will be advanced through the application of physical and virtual forms of drawing and modeling. Projects demonstrate a relational understanding of the topics presented in the Structures, Materials, History, and Methods courses. Various Vignettes will be accomplished throughout the semester to introduce and explore ideas necessary to prepare for the final project.

Graduate Assignments

The Masters of Architecture is considered the terminal degree for professional programs. In practice, M.Arch graduates are expected to contribute to the dialogue and considered to be mentors to the undergraduates. The graduate students will be given an extra assignment to fulfill their requirements for the degree. The assignment will be given after the first week of class and will include independent research. The research will be presented to the entire class for presentation and discussion.

Pedagogy

The instructional and learning environment in this studio may or may not be different from previous studios and academic experiences due to the new facilities, teaching style of the professor, frequency of assignments, and emphasis on presentation. The use of computer software will aid traditional methods of handcrafted drawings and models. The studio will use a hybrid of both physical and digital modeling. Each project may require investigations into both methods. Design projects in this class are expected to be layered with ideas and conceptual thought along with practical solutions to basic programmatic elements. Process is extremely important for both the learning process and what is conveyed during presentations.

The use of desk critiques, group discussions, and guest lectures will be an integral part of the learning process where students are responsible for presenting and discussing concepts individually and in front of numerous classmates, colleagues, and critics. This requirement places the student in a position to explain their project at any time in front of the whole class. The experience of discussing ideas to fellow colleagues in an articulated way is imperative to a successful education in architecture. Students must be prepared for each class – this includes reading assignments, research studies, design assignments, and presentations. The architectural studio has always been an inclusive environment where students learn not only from the professor, but also from each other. The expectation that you work in the studio beyond the required class time is not only encouraged, but has been documented to be beneficial to the knowledge base building required to become good problem solvers in our profession.

NAAB Criteria:

This course meets the following performance criteria from the 2014 NAAB Conditions for Accreditation during the semester. For the current conditions and procedures visit: http://www.naab.org/accreditation/program-resources/current-conditions-and-procedures/

PART TWO (II): SECTION 1—STUDENT PERFORMANCE—EDUCATIONAL REALMS AND STUDENT PERFORMANCE CRITERIA
The accredited degree program must demonstrate that each graduate possesses the knowledge and skills defined by the criteria below. The knowledge and skills defined here represent those required to prepare graduates for the path to internship, examination, and licensure and to engage in related fields. The program must provide student work as evidence that its graduates have satisfied each criterion.

The criteria encompass two levels of accomplishment:

*Understanding* - The capacity to classify, compare, summarize, explain, and/or interpret information.

*Ability* - Proficiency in using specific information to accomplish a task, correctly selecting the appropriate information, and accurately applying it to the solution of a specific problem, while also distinguishing the effects of its implementation.

**Students will be introduced to the** following NAAB criteria:

B.10 Financial Considerations

C.1 Research

**Students will demonstrate understanding in regards to the following:**

N/A

**Students will demonstrate ability in regards to the following:**

A.6 Use of Precedents  
B.3 Codes and Regulations  
B.6 Environmental Systems  
C.2 Integrative Evaluations and Decision-Making Design Process  
C.3 Integrative Design

**GRAD section**

**Students will be introduced to the** following NAAB criteria:

A.6 Use of Precedents  
B.1 Pre-Design  
B.4 Technical Documentation  
B.5 Structural Systems  
B.7 Building Envelope Systems  
B.10 Financial Considerations  
C.1 Research

**Students will demonstrate understanding in regards to the following:**

N/A
Students will demonstrate ability in regards to the following:

A.2 Design Thinking Skills
A.3 Investigative Skills
A.4 Architectural Design Skills
B.2 Site Design
B.3 Codes and Regulations
B.6 Environmental Systems
C.3 Integrative Design

Studio Conduct
Each student is expected to work in studio. Appropriate media and materials are expected to be in the studio at all times. These may include a laptop computer and software, tracing paper, pencil and pens for sketching, scales, and model making materials. It is each student’s responsibility to be prepared at all times during studio for class critiques. Due to the size and space of the studio, please respect others need for a quiet, supportive, and academic environment. Headphones/earbuds are allowed, but students are not permitted to watch videos during class time. Visitors are not permitted in the design studio during class hours unless previously discussed and approved by the professor. Students are responsible for keeping the design studios clean and neat at all times to promote a healthy educational environment. At the conclusion of the semester, students must remove all projects, supplies, and personal equipment. Your final grade for the class will be held if the area is not clean and presented the way it looked the first day of class. Studio cleanup date and time are listed below.

The professors will make personal books available to the class until such time that a book is lost or stolen. Please keep these books in the studio with reasonable security.

Attendance
Regular formal and informal interaction with faculty and peers during scheduled studio time is key to a successful teaching and learning process in a professional program. Full course participation by all students is the normal expectation of our program in Architecture. This participation will be reflected in factors such as regular class and studio attendance, active participation in class discussions and reviews, relationship of the development of project work with the studio, and positive interaction with faculty and classmates. It is essential that you come to studio prepared to display and discuss your ideas since each meeting with your instructor(s) will be evaluated in terms of your preparedness. In addition, arriving on time and staying the entire period is assumed unless the absence is excused or special permission for the absence is granted in advance. Roll be taken and logged (in CANVAS) each class period.

Failure to meet these requirements for course participation will result in a reduced grade. For example, three (3) unexcused absences shall result in the semester grade being lowered one (1) letter grade. Four (4) unexcused absences shall result in the semester grade being lowered two (2) letter grades. All absences must be documented.

Class meets Monday, Wednesday, and Friday. A tardy exceeding 10 minutes after class has begun and/or leaving class without permission prior to being dismissed is considered an absence. Be pinned up and ready to present at the time prescribed by the professor for each presentation. Late pinups will not be allowed to present and will result in a “0” grade for that presentation. If you know you will be absent, tardy, or need to leave early please inform your professor prior to the date so we can plan accordingly. You may drop this course with a grade of "W" at any time prior to and by the appropriate drop date. See your Course Schedules for dates. YOU ARE COMPLETELY RESPONSIBLE FOR DROPPING THE COURSE! The
professor cannot drop a student from the course for any reason. Professor Butko will be out a few class periods due to standing project commitments and academic conferences, but various instructors will be covering the course content in class those days. Students are still required to attend class and submit work based upon the syllabus and assigned projects.

**Required Texts, Codes, Materials, and Tools:**

**Required Text:**

- *The Architect's Studio Companion: Rules of Thumb for Preliminary Design*

Although only one book is required for this class, there are numerous recommended books for reference. Readings and handouts will be assigned throughout the semester. Students will be responsible to know all the information within the texts and be able to answer questions during class discussions.

**Recommended Texts, Materials, and Tools:**

(some on reserve):

- *Materials For Design* by Victoria Ballard Bell
- *materials – architecture in detail* by Ojeda and Pasnik
- *The Function of Form* by Farshid Moussam
- *construction + materiality* by Farrelly
- *Eco Structures: Forms of Sustainable Architecture* by Terranova, Spirito, Leone, and Spita
- ASTM, ANSI, BIA, ASHRAE, manufacturer’s specs and installation details, etc.
- *Detail Magazine*
- Other resources that will be mentioned or posted on CANVAS
- Clamp light (highly recommended.)
- Large monitor to plug your laptop into, and a cable lock.

**Assignments and Grading**

Grading in studio is somewhat subjective and somewhat objective, but is based on development, advancement, enthusiasm, willingness to learn, exemplifying an understanding of the coursework, and work produced. Students are expected to communicate ideas through various mediums, express clarity of thought, and engage the audience. A defined rubric will be distributed for each portion and/or project.

**Students are required to:**

- show progress each class period
- participate in the mid/preliminary project review and final presentation

Assignments and grading are subject to change without notice, but key portions are currently scheduled as:

- **10%**  
  Assignment 1: Researching resiliency and systems (precedent studies, literature review, etc. including parallel systems)

- **5%**  
  Assignment 2 site

- **5%**  
  Assignment 2 KC

  Begin Student Project Blog/Website
50% Assignment 3: Norman / Moore Center for Resilient Design Education
conceptualization, development of given program, design development including MEP, acoustics, lighting, structure, thermal, etc., cost analysis, representation

Models, and Prototyping
Range of options from monolithic to environmentally-based hybridized/wrapped structures
1-2 weeks initially, remaining is simultaneous with Design Process

Student Project Blog/Website

A preliminary assessment grade will be assigned after the October review, with final grade for Phase 2 after the November review.

20% Assignment 3 continued: Design Refinement and Competition Boards
Final deliverables and presentation of project with required drawings and models - December 6 in the gallery (content, composition, and visual delight)

10% Professional Assessment – Assessment of professional conduct including class participation, passion for learning, craft (verbal, written, model, and drawing skills), daily work ethic, respect for classmates, academic growth, etc. [50% of this portion will be determined at midterm]

The framework of the studio will be through the execution of and submittal to the 2017-2018 COTE student competition focused upon a Center for Resilient Design Education showcasing experimental/passive prototypical design, particular to materials, MEP, lighting, acoustics, site, and environmental interaction.

Tentative Schedule (subject to change per professors’ discretion)

Considerable time outside class will be required for students to work through BIM tutorials to assist with incorporation of REVIT. Instructors will conduct desk critiques (crits) with each student, anticipated at least once a week. Students should be prepared on a daily basis to discuss progress and ask and answer questions.

Weeks 1-3 are leading up to giving birth to the semester design project! Learn from the process and apply the lessons to the entire project design scheme. Design process is what we teach, how you synthesize information in the design process is the purpose of this semester. Studio will function similar to an office and the students will utilize a standard template to submit REVIT models and digital files. Each assignment will be delivered via the individual CANVAS dropbox per the assignment conditions.

Students are required to incorporate REVIT for at least structure, HVAC, and exterior wall/skin development. A range and hybrid of software and hand drawings are permitted, encouraged, and expected throughout the semester. Possible CNS, LA, and/or ID collaboration may be scheduled throughout semester per professors’ availability and discretion.

COURSE SCHEDULE (SUBJECT TO CHANGE PER PROFESSORS’ DISCRETION)
Week 1
8/21 Introductions (students and professors), seating arrangements
ECLIPSE!!!
Get acquainted and welcome students to / back to Gould Hall
Review syllabus, assignments, teaching styles, and class trip prep