CLEMSON UNIVERSITY | SCHOOL OF ARCHITECTURE

Fall Semester 2022

SYLLABUS

ARCH 3510.004: Fluid Studio + ARCH 3511.004: Fluid Studio Laboratory

CRN: 86568 + 86569

6 credit hours

meets: MWF 1:30- 5:30 Lee Hall and on-line modality: in-person and synchronous online

instructor

Prof. Timothy Brown AlA NCARB tb2@clemson.edu Lee 3-132

office hours: by appointment (in person or online)

course description

Addresses architectural problems with varied scales, programs, and locations. Emphasizes the relationship between architecture and context. Projects include analysis, conceptual development, and architectonic resolutions. Continued development of graphic and oral communication skills. Design problems vary every semester according to current issues. May be repeated for a maximum of 18 credits. Preq: ARCH 2520. Coreq: ARCH 3511. (This is a vertical studio and will include ARCH 8570 students.)

course objectives and learning outcomes

This studio introduces students to multi-layered and interconnected aspects of urban planning and design through a multi-use high-rise project on an urban site. Building on previous design studios, students continue their investigation into architecture with a special emphasis on urban design and what is at stake when we plan buildings as part of rich urban ensembles. The key issues to be addressed will include: research methodologies, understanding the layered contexts of urban places, urban site analysis methodology, urban site planning strategies, use-program analysis and development, and the integration of urban design, building design and landscape design. Architecture studio design projects synthesize an almost unimaginable number of prompts, inputs, issues, requirements, and ideas into a credible proposal for the introduction of a new place/space into the build environment so at the end of the semester you should be able to design a fairly complex tall building for a very specific place, within a very specific urban ensemble, that that would stand up, keep outside out and inside in, provide for the user activities deemed valuable and clearly address objectives of the AIA Framework for Design Excellence.

critical thinking

This design studio includes a Clemson Thinks² (CT2) seminar module which aims to engage the multivalent project contexts while developing your critical thinking skills. The seminar will explore work by writers, film-makers, artists, and scholars to get a much wider and varied view of the issues encompassing this place in the world. The seminar will have you reading, analyzing, and discussing as we go - and then writing three narratives that assess the project contexts and delineate a framework for siting your project within them.

According to the Association of American Colleges and Universities "critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion." Although this definition may seem excessively reductive (and a typical product of the academic industry), the design studio's working mode is inherently 'critical' so thinking 'critically' is something you already know deeply. The AACU also says "creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking." This semester we'll try and merge the two ideas into a single effort we might call 'design thinking 2.0'.

studio design project

This studio will engage in a reflective and critical study of Chicago, tall buildings, low-carbon footprints, precast concrete, more Chicago, the civic realm, public space, and, well, the idea of what architecture is actually 'about'. The primary question posed by the studio is how we are to understand "urban" and "city" today. The studio's second question is how then we are to go about designing resilient and sustainable buildings for contested places?

The studio project will be the design of a multi-use high-rise sited on Chicago's Near South Side. The project site is an area that was part of the Michael Reese Hospital complex which was decommissioned and demolished in 2013. Michael Reese Hospital served a chronically under-served part of Chicago and its final demolition came after a long and hard-fought battle by Bronzeville residents who benefitted from the medical care and the well-paying jobs the hospital provided. Neither the health care or the jobs are available today. The original 1880 Michael Reese building at 29th and Groveland benefitted from development in the 1950's which was the result of a concerted effort among many parties to exercise the rubric of "urban renewal" to essentially further private interests and profits at the expense of the Black community that had been forced into the Bronzeville district by a city and society that was unable to accommodate the Great Migration's influx of new residents. More on the South Side Planning Board later.

All of these waves of displacement occurring, of course, on land that was essentially stolen from the people who were already in place before the 1800's westward expansion. So it would be safe to say the site is contested ground.

The City of Chicago has just approved a mega-development called Bronzeville Lakeside sited on forty-eight acres that encompass the hospital site. The project will feature a developer-driven mix of housing, retail, institutional and leisure that will eventually help grow the city's tax base and, supposedly, spur much needed development in the Bronzeville neighborhood.

The building you place on this site will be a mixed-use high-rise with particular attention paid to the relationships to the ground plane. A kind of skyscraper/ground-scraper that is woven into its extraordinary urban contexts. How might we reimagine spatial relationships arrayed vertically? How could site activity be pulled upwards while activities from the tower might seep away into the site?

We will be focusing on the design of an enclosure system using pre-cast concrete in coordination with Prof. Barrios' PCI-sponsored studio. His students will team with you at key moments to bridge from enclosure concepts to technical resolution.

NAAB student learning objectives and outcomes

The School of Architecture's educational mission is guided by the National Architectural Accrediting Board's 2020 Student Criteria, which include specific goals for knowledge and abilities. While our BA in Architecture is a pre-professional program the guidelines nonetheless offer a workable framework for this studio and are part of the ARCH 8570 structure. This course will focus on the following NAAB Student Criteria:

SC.1 Health, Safety, and Welfare in the Built Environment—How the program ensures that students understand the impact of the built environment on human health, safety, and welfare at multiple scales, from buildings to cities.

SC.3 Regulatory Context—How the program ensures that students understand the fundamental principles of life safety, land use, and current laws and regulations that apply to buildings and sites in the United States, and the evaluative process architects use to comply with those laws and regulations as part of a project. SC.4 Technical Knowledge—How the program ensures that students understand the established and emerging systems, technologies, and assemblies of building construction, and the methods and criteria architects use to assess those technologies against the design, economics, and performance objectives of projects

SC.5 Design Synthesis—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory

requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

SC.6 Building Integration—How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating integration of building envelope systems and assemblies, structural systems, environmental control systems, life safety systems, and the measurable outcomes of building performance.

course materials

Required Readings - TBD in concert with natural progression and development of the studio topic. Studio Materials - TBD in concert with natural progression and development of the design project.

assessment of student performance and grading policies

Your final course grade will be based on the quality of the final work as submitted at semester's end, and the quality of effort put forth over the entire fifteen-week semester. Particular attention will be given to the development, or on-going and continual refinement, of the studio design project. Special attention will be given to the level and quality of engagement with the full range of issues enveloping the studio project and project contexts. Work produced in the seminar module will be considered as integral elements of the design project.

grade scale:

- F Failed indicates the student knows so little of the subject that it must be repeated in order that credit can be received.
- D Pass indicates work below average and unsatisfactory, the lowest passing grade.
- C Fair indicates work of average or medium character. Satisfactory but without distinction. All work satisfactorily completed and submitted on time, work shows acceptable levels of engagement and effort, work shows basic understanding of material and methods. Quality of work and quality of effort aligns with the overall studio average but does not exceed the minimum project requirements or expectations.
- B Good indicates work that is definitely above average, though not of the highest quality. Work of good quality, energy, and involvement. The work surpasses the stated project requirements and expectations and displays higher than average levels of proficiency and engagement.
- A Excellent indicates work of a very high character, the highest grade given. Work of excellent quality, energy, and intense involvement; outstanding work that is clearly superior to B-level work. Work and effort display high levels of engagement, discipline, insight, curiosity, and ability.

key dates

The semester's primary design project will be organized as a series of escalating engagements with the topic and will include various pin-ups/reviews/critiques. The review formats and scopes of presentation materials will grow out of the project development and be detailed as the semester progresses but the fixed schedule items are:

Wednesday	24 August	semester launch, Fluid Studio presentations
Friday	26 August	studio launch
Tuesday	20-24 September	site visit to Chicago
Monday	10 October	100% site design review
Friday	04 November	100% DD review
Monday	07 November	fall break - no class
Wednesday	23 November	begin Thanksgiving break
Friday	09 December	studio final presentations (tentative)
Monday	12 December	final submission of semester's work

studio culture

The architectural design studio's project-based pedagogy and its centrality within the curricula mean it serves as a compounding element in relationship to the larger learning culture. But while it is central to the School's work, it is not the center, and while the program of study is organized around the studio sequence, studio is not the singular focus.

Organizing a studio is itself a design project. The studio head is not, however, the solo designer; designing the studio is a collective project created, managed, and assessed in real time by all the participants - faculty and students. Each studio collective has to work collaboratively to define the goals and objectives and plan the studio workflow in a way that optimizes all the resources and energies. The studio head provides the framework and explains the performance criteria, but a successful studio draws on the strength of the studio's collaborative nature to lay out the work. Reviews of the studio's progress towards its stated objectives should be an on-going project and dovetail with the critique of the student work. And at the end the studio organization itself should be assessed in exactly the same way the student work is assessed.

A healthy studio culture will sustain an environment of free-ranging inquiry, mastery of diverse skill sets, meaningful engagement with the discipline, and the development of critical thinking. A healthy studio culture also supports the continuous growth and development of the faculty right alongside the students.

project-based pedagogy

The history of architectural education has been organized around the idea of learning by doing. This design studio is organized similarly; around a question, an issue, a challenge, or a project. The effort is non-hierarchical, non-linear, free-wheeling and open-ended. Project-based learning is built around the work of doing but the experiential aspect also requires a reflective and critical approach. And it requires commitment to the process of learning.

curiosity

Studios are fueled by the spirit of exploration and driven by curiosity. And curiosity, if it is to be productive, is neither idle or passive, but pro-active. Curiosity produces the opening questions that are usually framed as why? or why not? While curiosity grows out of some mostly inscrutable place deep in the imagination, the work to answer the question will quickly move towards models that are open to discourse.

teaching

Every member of the studio collective - students and faculty - is learning. Every member of the studio collective is then also teaching. Teaching in the studio environment is omni-directional and constantly rebounding. Although faculty, critics, and various experts can bring important resources to the project, students offer vast reserves of information and deep knowledge of their own. Learning flows in many directions and so does the teaching.

collaboration

The design studio at Clemson is, first and foremost, a collaborative learning environment. Collaboration means that faculty, students, adjuncts, critics and various expert consultants are all joined together in the pursuit of an idea. Inquiry driven by curiosity or need or desire will forge a unique learning environment within which each participant's role is vital. Each studio member has an obligation to support an atmosphere of teamwork and sharing.

respect

Studios depend upon the willingness of each member to enter into the on-going studio discourse with the expectation that their input will be heard and considered. A successful collective effort demands that absolute and unequivocal respect be extended in every direction and that no one ever feels their active participation is hindered or discounted. Ideas are tested through consideration, discussion, and even argument but each point of view gets an airing. Listening is one of the key measures of respect.

engagement

The pursuit of an idea in a collaborative venture demand that each and every participant be fully engaged with the topic and with the momentum of the studio work. To be engaged requires active participation and a willingness to search, challenge, and critique. To be engaged also demands that all studio members be present and participating fully. Faculty and students are expected to be present and working during the entire studio session.

authority

The studio's work is grounded in a measured respect for authority. Vernacular traditions, oral history, stories, technical knowledge, specialized skill sets, and experience all have ways of slowly assuming some notion of authority. But the studio's task is to carefully scrutinize claims of authority to determine if these settled views retain relevance. It's perhaps the most difficult paradox of studio culture to both grant some measure of authority to an idea, practice, or notion while at the same time testing it critically for its continued relevance.

critique

The studio is not a machine for teaching, it is a machine for learning. Learning through inquiry is reliant on continual critical examination and evaluation. The critique is one of the tools by which the question at hand is continually reframed, questioned, and brought back into the work. Critiques and reviews foster critical engagement with work as a way of moving the project forward. The critique is an important moment in the studio pedagogy because the work 'on the wall' has the capacity to open up the studio question through exchange. The objective of the critique is to couple work with discourse about the work to produce something entirely new. It is an exercise that is multi-directional, potent, and absolutely reliant on full engagement by the studio participants. It is the ultimate collaborative studio product.

assessment

The studio calls on so many diverse skill sets and areas of knowledge that the hyper-reductive grading system, while mandated, is limited in its range of useful response. Thorough assessment of effort and outcomes should be both broad and deep to be helpful. Feedback is most helpful when it is frequent, supportive, and candid. Assessment is part and parcel of the overall studio discourse and the feedback loop serves all the studio participants.

balance

Finally, the design studio's significant credit load and its role as a synthesizer of many strands of architectural study mean it has special place within the curriculum. But the studio, while an organizing element, is not the sole focus of the program of study. Knowledge and ideas developed through other courses and experiences fuel the studio inquiry and must be afforded room and energy. A fertile studio learning culture recognizes the need for time devoted to thinking and working across many fronts. And most importantly, a rich studio culture demands that all the participants maintain a healthy balance between the work of the studio and the work of living fully in the world. The well-being of the studio hinges on the well-being of the participants.

studio policies

lee hall house rules

"Lee Hall Complex Rules" indicate that students shall not spray paint or use spray glue indoors, and shall not spray any exterior surfaces, including grass and plants. Students shall not otherwise damage buildings or facilities and may be fined for doing so. Students shall maintain cleanliness, dispose of their waste properly, and shall remove all belongings after final exams and/or final reviews. See the Lee Hall Complex Rules handout for details.

class attendance

In accordance with university policies you are expected to be well prepared for — and to routinely attend — all classes except when extenuating circumstances intervene. Experience suggests that there is a direct

relationship between active participation and performance; if you are not participating you are not going to do well in the studio's collaborative project-based pedagogy. Attendance at all class meetings for the full period is expected.

late/absent professor

Responsibilities to the School, the College, the University, family and to the demands of conducting a professional practice will probably result in an unplanned absence or late arrival. I take my teaching obligations very seriously and assure you that I will make every effort to balance outside pressures and the studio. If I am not in studio and have not emailed the class with instructions, you should simply consider the day to be an in-studio work day and carry on without me.

late work policies

Any and all work must be submitted complete and on time. Work not submitted or displayed in time for pinups or reviews will not be critiqued or evaluated. Failure to submit the final project dossier for grading by the 12 December deadline could result in failure of the course.

course communications

Please check your clemson.edu email address at least once a day for potential messages dealing with this course. The instructor, as per CU policy, will only utilize your clemson.edu email address. We will be using Canvas and Box for posting material, references, and for some communications. The studio may also decide collectively to utilize alternate platforms for sharing work and messaging.

technical failures

Loss of your digital work or failure to manage output are unacceptable excuses for failures to present or submit required presentation material. Learn how to print/plot from of all relevant apps and back-up your work to some location other than your computer's hard-drive. Save often, back-up often.

standard academic policies

Refer to the Academic Regulations section of the Undergraduate Catalog for more information.

academic integrity

As members of the Clemson University community, we have inherited Thomas Green Clemson's vision of this institution as a "high seminary of learning." Fundamental to this vision is a mutual commitment to truthfulness, honor, and responsibility, without which we cannot earn the trust and respect of others. Furthermore, we recognize that academic dishonesty detracts from the value of a Clemson degree. Therefore, we shall not tolerate lying, cheating, or stealing in any form. See the current graduate student handbook for all policies and procedures.

accessibility

Clemson University values the diversity of our student body as a strength and a critical component of our dynamic community. Students with disabilities or temporary injuries/conditions may require accommodations due to barriers in the structure of facilities, course design, technology used for curricular purposes, or other campus resources. Students who experience a barrier to full access to this class should let the instructor know and make an appointment to meet with a staff member in Student Accessibility Services as soon as possible. You can make an appointment by calling 864-656-6848, by emailing studentaccess@lists.clemson.edu, or by visiting Suite 239 in the Academic Success Center building. Appointments are strongly encouraged – drop-ins will be seen, if at all possible, but there could be a significant wait due to scheduled appointments. Students who have accommodations are strongly encouraged to request, obtain and send these to their instructors through the AIM portal as early in the

semester as possible so that accommodations can be made in a timely manner. It is the student's responsibility to follow this process each semester.

You can access further information at the Student Accessibility website. Other information is at the university's Accessibility Portal.

title IX

The Clemson University Title IX statement: Clemson University is committed to a policy of equal opportunity for all persons and does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender, pregnancy, national origin, age, disability, veteran's status, genetic information or protected activity in employment, educational programs and activities, admissions and financial aid. This includes a prohibition against sexual harassment and sexual violence as mandated by Title IX of the Education Amendments of 1972. This Title IX policy is located on the Campus Life website. Ms. Alesia Smith is the Clemson University Title IX. Clemson University aspires to create a diverse community that welcomes people of different races, cultures, ages, genders, sexual orientation, religions, socioeconomic levels, political perspectives, abilities, opinions, values and experiences.

emergency preparedness statement

Emergency procedures have been posted in all buildings and on all elevators. Students should be reminded to review these procedures for their own safety. All students and employees should be familiar with guidelines from the Clemson Police Department.