

ARCH 4101 - ADVANCED BUILDING DESIGN STUDIO

Fall 2019 Course Description

University of North Carolina at Charlotte, School of Architecture

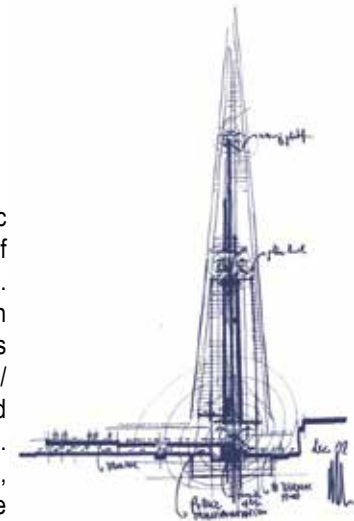
Instructor: Nicholas Ault

5 Credit Hours: MWF 2:00 – 5:30 pm

Office Hours: By Appointment Only

PREMISE

As a keystone city in the New South, Charlotte has seen a near meteoric rise in population and growth that can clearly be seen by the amount of construction that is currently taking place, especially in the Uptown area. Given this rapid development a new form of densification is happening in Charlotte, which the city has been largely unprepared for. The speed of this growth is leaving many sites disused, misused, derelict, unappealing and/or seemingly unbuildable. This studio seeks to uncover these sites and investigate opportunities for further development within the Uptown area. Through the intervention of a tall building we will fortify Charlotte's skyline, add street level public spaces / amenities and encourage responsible growth that will enliven the city as it continues to evolve and grow.



The Shard - Renzo Piano

This studio will employ a wide range of study criteria including representation, analysis, urban identities, practical building and sustainability as constituent elements of the semester. A core component of the studio will be the entrance of all projects into the AIA Committee on the Environment (COTE) competitions sponsored by the AIA. This competition is evaluated by 10 judging criteria, which can be found on the ACSA website and will be discussed during the project introduction. These criteria will be primary drivers for evaluation along with identified issues and a clearly defined narrative that will be cultivated by each group of students and dictated by their site analysis. More information on this competition will be discussed upon announcement.

PROGRAM

Programmatically this semester we will be designing a multi-use tall building that will feature retail, housing and/or office components. This will give us opportunity to study the urban issues nascent in the city's current stage of development as well as to make an intervention into an area of the city that is undergoing rapid transformation. The appropriate square footage of each intervention will be established based on site context and opportunity but must be between 300,000 s.f. and 750,000 s.f.

METHOD

This studio will utilize a variety of prescribed graphic strategies and analytical techniques in order to construct a cohesive and comprehensive narrative from which to understand a site(s) in Uptown Charlotte. The narrative illustrations will serve as a jumping off point from which to apply a loosely delegated program that will incorporate master planning through basic planning and detailing of a tall building.

Alongside this process, students will analytically explore recent typological examples in an attempt to understand contextual ideas, basic building planning and building code as well as technical implementation of the skin.

Lastly, we will attempt to examine the design process and urban buildings through a cultural lens. This will enable us to explore and employ experimental techniques that may spark innovation in the design process and that may lead to culturally relevant architectural propositions. Culture, in this sense, will also be the umbrella under which technological and environmental systems will be integrated into the design process. Each student will be expected to establish a strong cultural framework for his or her project, which will give it its unique impact, voice and polemic vision.

EVALUATION

The studio will consist of four basic “stages” each marked by a review of work completed to date, all work will be team based (2 students per group) and will consist of the following components.

1. Site, Cultural and Opportunity Analysis + Narrative Analytique
2. Narrative, Basic Programming, Concept and Schematic Design
3. Integrated Design Development
4. Final Design Development, Detailing and Documentation

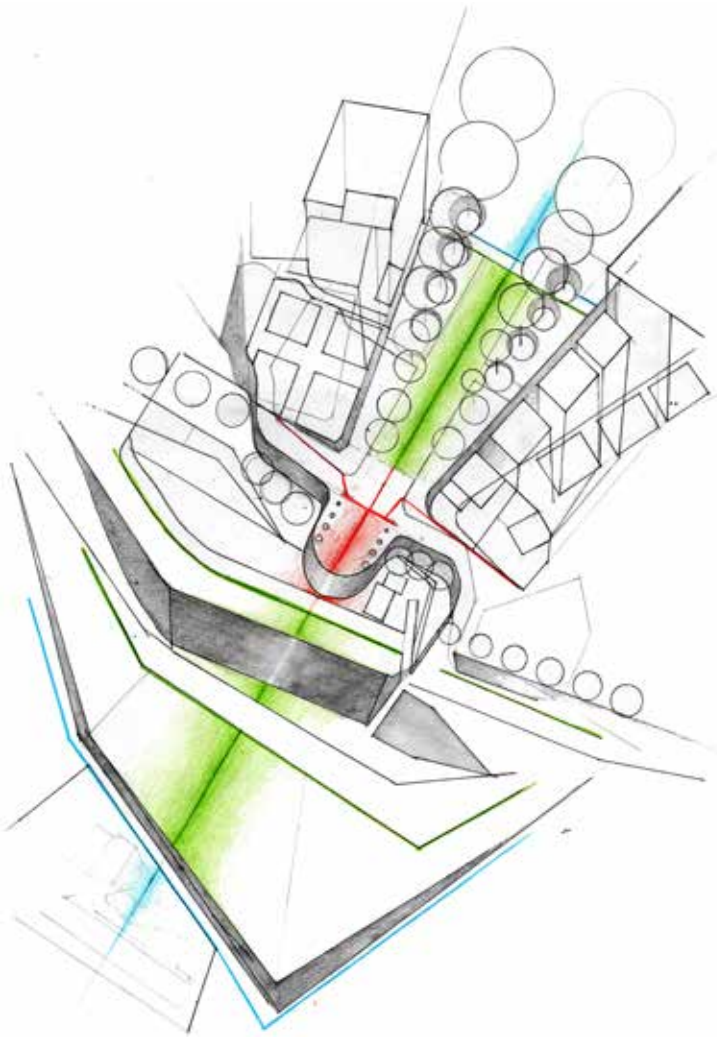
d



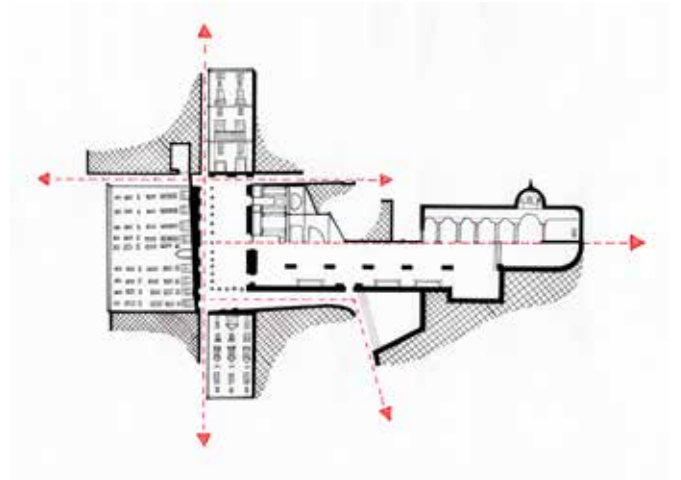
Herzog + deMeuron - 6AM

L35 CHARRETTE

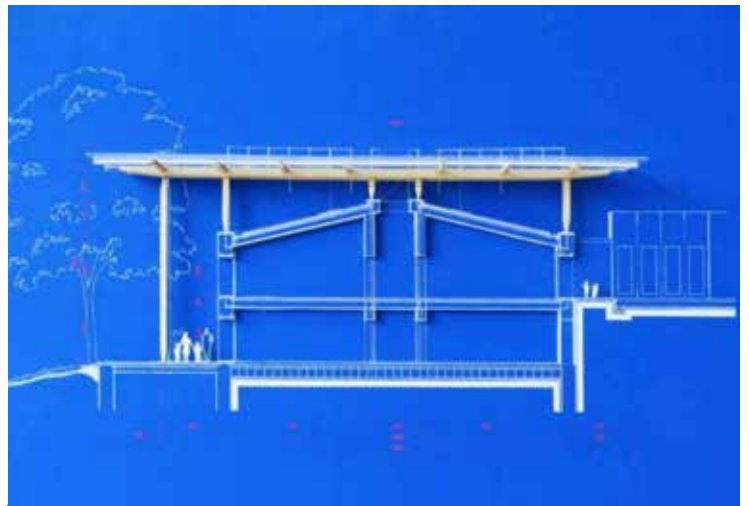
Additionally, this studio may be a participant in a Design Charrette to be orchestrated and guided by Madrid based Architecture firm [L35 Arquitectos](#). This will be a multi-day portion of the semester that is yet to be scheduled or fully planned. Additional details and schedule will be provided as they become available. (This will be a graded portion of the semester and participation is mandatory)



Site Analysis Sample



Urban Analysis Sample



Hybrid Drawing - Renzo Piano

PRINTING	Students are expected to print their digital work on a regular basis. We understand that printing is not cheap, and alternatives to printing are sometimes possible, but students must understand that printing is a necessary stage of the design process, not something that occurs only for final reviews.
STUDIO	All students are expected to maintain a working studio space. Working at home is not forbidden, but the studio environment is an important aspect of the learning process. Additionally, this semester is built on team exercises, it is important that each group be a true partnership that shares in responsibility and is built around open communication and honesty. These are foundational elements of the studio culture and will require you to be understanding, tolerant, open to new ideas and physically present in a shared environment; the establishment of a co-working space is critical to your success over the course of the semester.
RESEARCH	Research is a critical element of the semester and the utilization of a diverse range of information will be critical to your success - this information does not come exclusively from the internet (surprise!). You will be required to scour books, periodicals, firm websites etc. for real, tangible information. For assistance with research, students are encouraged to contact the Arts and Architecture Liaison Librarian, Jenna Rinalducci to ask questions via email (jrinaldu) or to make an appointment to talk with her.
ATTENDANCE	<p>In order to fully benefit from and participate in this course, attendance is required. More than two (2) unexcused absences will lead to an automatic lowering of a student's grade by a full letter grade (10%) and may constitute grounds for failure of this course. Each subsequent absence will also result in the reduction of the final grade by a full letter grade (10%). Full attendance for each day of studio is required arriving late or leaving early will be counted as an absence unless you have received confirmation from me prior to being tardy. Documentation of excused absences must be submitted to the Professor in writing within seven (7) days of the absence and show evidence of the medical or family emergency, as outlined by university policy. When possible, notify your instructor as early as possible in advance of a potential absence. You will be notified of any / all documented absences by me via email to formalize the absence.</p> <p>Failure to attend a review will result in the immediate reduction of a full letter grade (10%) and the student will be responsible for orchestrating a review outside of studio time. Should the student not arrange a review for a missed review within seven calendar days of the original review a zero will be assessed for this portion of the semester. Failure to attend / present at the Final Review will result in immediate failure of the course unless severe illness or extreme hardship is presented to the instructor before hand.</p>
LATE WORK	Late work will not be accepted, and will not receive credit. If a student's work is grossly incomplete or of such poor quality the faculty may deny the student a review, and an appropriate grade will be issued at that time.
CONTACT	<p>Design studio allows for a high degree of so-called 'contact hours'. Outside of studio time, faculty maintain a myriad of other commitments, so the best means for facilitating contact with the instructor outside of class is via e-mail, whether it is a question, an announcement, or a request for a meeting. Instructors will endeavor to respond to your emails as quickly as possible, but cannot guarantee immediate responses.</p> <p>Similarly, whenever it is necessary for your instructor to communicate with you outside of class-time, whether collectively or individually, it will be via email, Moodle, and/or Canvas. These notices might be regarding schedule changes, additional readings, information pertinent to your assignments, etc. As per University policy, the instructor will use your UNCC email address, and students are responsible for checking their UNCC email, as well as web-based sites for the course, on a DAILY basis.</p>
EVALUATION	Overall, the criteria for evaluation will take into account the student's total efforts and participation in the studio and the student's work. In design work and in studio at large, premise, process, participation, product, presentation, and documentation will be assessed for quality of work and effort. The insight, originality and innovation of an idea, your diligence in questioning and exploring, your effective

communication skills, and the care and craftsmanship of your continual efforts all count in the ultimate evaluation of your work.

The studio exercises will require the student to communicate their proposals in four interrelated formats: (1) written descriptive narrative; (2) graphic imagining; (3) modeling; and (4) verbalizing. Studio exercises may focus on one or more of the communication techniques. Studio products will include sketches, diagrams, sketch models, traditional architectural drawings, perspective drawings, digital models and drawings, final models, presentation boards, portfolios, etc. Design drawing and study modeling will be regularly used as generative tools in the design process rather than for purposes of presentation only. Combined use of analog and digital techniques is recommended; over-reliance on digital drawing results in a reduced set of skills.

Criteria for the review of design work include:

1. UNDERSTANDING (Premise, Idea). The student understands the issues at hand as described in the project statement and the proposed solution.
2. DEVELOPMENT (Process, Work). The student pursues diligent and continual exploration and refinement of design ideas and concepts evolving from the abstract cognitive phase into a more complex and concrete phase. Precedents in architecture are a critical component of this phase. Responsiveness to criticism and suggestions from faculty and outside reviewers is also essential to progress and project development.
3. CRAFTSMANSHIP (Skill, Product, Result). The student is expected to show care, interest, commitment, and skill in developing and presenting work. (Clients do not trust sloppy architects!)

Evaluation of design work is subject to qualitative and quantitative standards. The following guidelines will apply in the determination of the success of individual and overall student performance:

A – Exemplary (90.000+)

- The 'A' project sustains the quality of the best possible, publishable example in all aspects.
- This is outstanding work. Innovation and imagination have been demonstrated in the creation of the work and a significant depth of understanding is evident in the student's interpretation of the project requirements and focus. The full potential of the project has been explored, developed, and communicated with great care and consideration.

B - Above Average (80.000+)

- General excellence and sustained improvement with occasional superior achievement.
- The 'B' project will exhibit some superior aspects while meeting all other requirements at a high level as well.
- This is good work. The student has exceeded all requirements of the project, and has shown more than adequate understanding of its intent and focus. The work demonstrates a thorough-going exploration, development, and execution, including good craftsmanship.

C - Average (70.000)

- All work completed competently and on time, all classes attended, and a general improvement in performance.
- The 'C' project is complete and meets all requirements competently and on time.
- This is mediocre work. All the minimum requirements of the project have been met. The work lacks depth of understanding and development. The overall product exhibits little imagination or innovation, and does not provoke comment.

D - Below Average (60.000+)

- Lack of reasonable craft, or inattention to the work, or unresponsiveness to advice, or a lack of development.
- The 'D' project meets only some requirements competently and on time.
- This is poor work. The work has not even met minimum requirements. It is extremely weak and lacks depth, understanding, and imagination. The care and craftsmanship of the work is inadequate and demonstrates a low level of skill.

F - Failure (59.999 and below)

- Consistent inattention to deadlines or the development of the project, late or incomplete work, poor attitude, or insufficient improvement.
- Tardy, poorly attended or underdeveloped projects risk failure at the discretion of the instructor.
- This is unacceptable work. The work shows no interest or any attempt to confront the issues presented. The work is incomplete, undeveloped, unimaginative, uninspired, poorly crafted, and demonstrates little or no understanding.

Incomplete (I)

- This is incomplete work. An 'I' can only be given to a student for work that is incomplete due to dire and uncontrollable circumstance(s) that have strictly prohibited the work from being completed. Any situation responsible for consideration of granting an 'I' must be fully documented by the student and approved by the instructor. Only then will the grade of 'I' be given. Make up of the incomplete work must be done in accordance with University regulations. Specific guidelines and evaluation criteria for each grade component will be provided in advance of due dates.

Final grades for all sections will be calculated as follows (subject to change notification):

Project 1: The Body Measure	10%
Project 2: Place + Purpose	15%
Project 3: Architectonics	25%
Project 4: Mid-Term Presentation	5%
Project 5: Design Detailing + Practice	20%
Final Presentation + COTE Submission	10%
Documentation	5%
In-class Participation / Process	10%

Note: This grade breakdown is subject to change depending on the involvement of L35 in the studio. Once their participation is established a revised grade breakdown will be distributed to the class.

Students will receive a numerically calculated grade sheet at the end of each phase of the semester. As this semester will predominantly be group based these grades will be shared with individual score coming in the In-Class Participation / Process area and in the early individual projects.

POLICIES

All courses in the CoA+A are governed by the rules and regulations of UNC Charlotte as stated in the University Undergraduate and Graduate Catalogs. For more information about these policies, please refer to the appropriate catalog, which can be found online at: <http://catalog.uncc.edu/>.

Academic Integrity: All written and graphic submittals, in-class presentations, and other academic tasks should be your individual and original work unless specifically noted as group projects. No cheating. No plagiarism. It is assumed that you are aware of and will comply with the spirit and specifics of the UNC Charlotte Code of Student Academic Integrity, which is available online at: <http://www.legal.uncc.edu/policies/ps-105.html>.

Disability: If you have a diagnosed disability which influences your ability to learn or have your work assessed in the classroom, all efforts will be made to accommodate your needs. Please provide a copy of your Letter of Accommodation from the UNC Charlotte Office of Disability Services by the end of the second week of classes. Their office is located in 230 Fretwell and more information is available online at: <http://www.ds.uncc.edu/>. All information about your disability and accommodations will remain confidential.

Please see the instructor if you are interested in being an official scribe (note taker) for this course. Your notes will be made available to others in the class with special needs (including students for whom English is a second language and/or students with learning disabilities).

Electronics & Equipment: Being fully present in studio also means that cell phones are switched off and computer usage is limited to studio work during studio hours. All portable devices, including but not limited to laptops, tablets, telephones, mp3 players, et cetera, are forbidden in group discussions and reviews, except when allowed by an instructor for note-taking or other pedagogical purposes. Students who bring devices that disturb the class will be asked to leave and will be assessed an unexcused absence. Zero tolerance.

All students are required to abide by the UNC Charlotte policy on Responsible Use of University Computing and Electronic Communication Resources, which can be found online at: <http://www.legal.uncc.edu/policies/ps-66.html>. Remember that harassment, as defined in the UNC Charlotte Sexual Harassment Policy, is prohibited, even when carried out through computers or other electronic communications systems, including course-based chat rooms or message boards.

Because of the collaborative environment of enquiry that is the Design Studio, you may well learn as much from your peers as you do from your professors. The culture is enriched and sustained by your positive contribution. And because student and instructor alike share responsibility for the collective culture of the studio, all participants are expected to enhance its intellectual life by attending to the following:

Presence: The studio is intended as the primary site for production of work: students who work in studio benefit from the collective presence of their peers, and will out-perform students who attempt to complete work elsewhere. It is not recommended that students use studio time for gathering materials, data, equipment, etc., unless approved by the studio instructor. Presence in studio also means much more than mere physical proximity to your desk during scheduled class time. You are expected to be fully present intellectually and emotionally for the duration of studio as well, and you are urged to make the most of this time each session. The studio is a community: respect one another's need to work at all hours. Idle conversation and horseplay are distractions, and should not take place within the studio.

Pro-active participation: All students should be actively involved in all discussions, pin-ups, and reviews, as well as meet deadlines, schedules and targeted project completion. You need to take risks and be responsible for your project. The work is yours. Visible progress is expected of students between and during each class session, and forms the basis for availability of individual critique. No work = no feedback. Time management skills are of the utmost importance. Regularly ask yourselves how to best make use of your time in any given instance.

Respectful Interaction: All perspectives and opinions are welcomed and will be respected in this classroom or studio, as long as they are presented in manner that is respectful. Intolerance will not be tolerated. Be mindful of your conduct when engaged in experiences and discourses with those who differ from you in appearance, race, ethnicity, beliefs, gender, sexuality, style, politics or intellectual

position. If you feel personally uncomfortable or alienated, or that diversity in general is any way stifled in this class, please let the instructor know so that the situation can be remedied.

Also be aware that your studio is a public place so be sensitive to images and other materials around your desk, including on your computer, which might be offensive to others. In addition, all students are required to abide by the spirit and the specifics of the UNC Charlotte Sexual Harassment Policy, which can be found online at: <http://www.legal.uncc.edu/policies/ps-61.html>.

SCHEDULE See final page of this document

NAAB The School of Architecture at UNC Charlotte maintains accredited status through the National Architectural Accrediting Board (NAAB), which reviews the curriculum, facility, faculty, and program resources annually, and conducts an intensive site visit every six years. As part of this review, the NAAB will review student work produced in courses throughout the curriculum. This course will include content related to the following NAAB Student Performance Criteria:

A.2-Design Thinking Skills: Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.

A.3-Investigative Skills: Ability to gather, assess, record, and comparatively evaluate relevant information and performance in order to support conclusions related to a specific project or assignment.

A.4-Architectural Design Skills: Ability to effectively use basic formal, organizational and environmental principles and the capacity of each to inform two- and three-dimensional design.

A.5-Ordering Systems: Ability to apply the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

A.6-Use of Precedents: Ability to examine and comprehend the fundamental principles present in relevant precedents and to make informed choices about the incorporation of such principles into architecture and urban design projects.

B.1-Pre-Design: Ability to prepare a comprehensive program for an architectural project that includes an assessment of client and user needs; an inventory of spaces and their requirements; an analysis of site conditions (including existing buildings); a review of the relevant building codes and standards, including relevant sustainability requirements, and an assessment of their implications for the project; and a definition of site selection and design assessment criteria.

B.2-Site Design: Ability to respond to site characteristics, including urban context and developmental patterning, historical fabric, soil, topography, ecology, climate, and building orientation, in the development of a project design.

B.3-Codes and Regulations: Ability to design sites, facilities, and systems that are responsive to relevant codes and regulations, and include the principles of life-safety and accessibility standards.

C.2-Integrated Evaluations and Decision-Making Design Process: Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.

C.3-Integrated Design: Ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.