# ARCH 7101 -  ADVANCED BUILDING DESIGN STUDIO

Fall 2020 Design Studio Syllabus
University of North Carolina at Charlotte, School of Architecture
Center City Building
Instructor: Nicholas Ault
5 Credit Hours: MWF 2:00 – 5:30 pm
Office Hours: By Appointment Only

Course Website: www.sodium-design.com/teaching/teaching/teaching/f20.php

**Premise**

The past decade - and especially this year - has seen the world go through near unprecedented turmoil - uncontrolled climate change, natural and industrial disasters, political and social unrest, a global fight for racial equality and a global pandemic, among others. Our world may never be the same; and the fact that Architects have to address these, and other, issues in earnest can no longer be ignored. While these past decades have demonstrated a groundswell of change that fundamentally challenges the foundation of our field, Architecture continues to lag behind the global desire for change and adaptation and has been widely performing in a purely reactive, pragmatic and financially dependent manner.

Architecture must leverage the depth and breadth of its knowledge to become an active participant in the world.
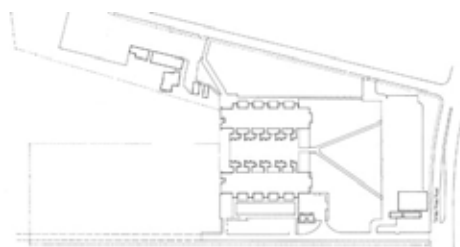


Salk Institute - Louis Kahn

**Method + Program**

This studio will employ a wide range of study criteria including precedent, processes, representation, analysis, site identities, practical building, algorithmic thought and sustainability as constituent elements of the semester. A core component of the studio will be the entrance of all student projects into the AIA Committee on the Environment (COTE) competition that is annually sponsored by the AIA. This competition is evaluated by 10 judging criteria, which can be found on the ACSA website. These criteria serve as compulsory drivers for evaluation in the competition but the studio will provide supplemental criteria that will be cultivated by each student group and dictated by their programmatic study and project development.

Programmatically the semester will constitute the planning and designing of a multi-building complex that will venture to become a participant in the resolution of the issues outlined above and will take on the task that Architecture can in fact be part of the solution. (Architecture cannot save the world but it should be a an active participant in its healing process.) We will study historical precedents, processes and methodologies in order to formulate a well informed, holistic and carefully vetted proposal for how architecture can be an active participant in our ever evolving world. The specific program components will be developed the student groups and assisted by the professor

The site(s) for this studio could be either urban, suburban or rural in nature and each has been selected to carry a certain amount of difficultly in solving the above problem. The appropriate square footage of the intervention will be established based on site context, developed program, site opportunity and associated narrative but is likely to be between 750,000 s.f. and 1,000,000 s.f. with additional focus paid to a portion of the overall complex.

**Readings + Research**

As this is a Graduate course a theoretical framework is critical to successful work and there will be reading and writing components to this studio. Some of these readings will be provided by the Professor but it is intended that readings be provided by each student that frame their approach and arguments throughout the semester.

All readings will be cataloged and presented on the course website

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| **Course Outline + Schedule** | The studio will consist of two basic "stages" each marked by review(s) of work completed to date, parts 2+3 work will be team based (group size pending) and will consist of the following components. |

1. Case Study - "Process Leads to Product"
2. Design Project
        a. Site Study + Program Development
        b. Narrative, Basic Programming, Concept and Schematic Design
        b. Integrated Design Development
        c. Final Design Development, Detailing and
3. Process + Final Product Documentation

**Printing, Information Sharing + Presentation**

Under normal circumstances the printing and reviewing of student work would be a requisite requirement of a studio course. Given the current state of the world as much as is possible work will be shared and discussed digitally. This will include sketches, 3d models (Revit, Rhino etc.), presentation documents etc. As such the every student MUST be prepared to actively share this information prior to class via an established file sharing service - to be discussed - and share this folder with the professor and provide read / write access to this folder. Anything that needs reviewed , shared or catalogued must be submitted to this folder prior to the start of class that day in order to be reviewed. A sample folder structure should look very similar to the example. At most one weeks worth of this catalog is to remain in this folder. It is not permissible to use these folders as your data storage for the semester, these shall only be utilized for daily discussions and cataloging.
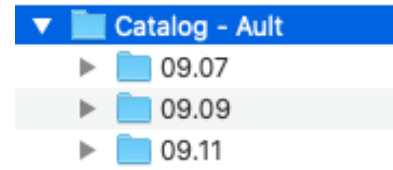


**Studio**

This studio is being presented as a Hybrid Studio, meaning that there will be two student groups - likely a Monday Group + a Wednesday Group, though this could change with Friday being a fully online day for everyone. As everyone is aware things are very likely to change and everyone needs to be understanding and flexible form a schedule standpoint. I will endeavor to ensure that everyone gets the feedback and attention that they require - I cannot guarantee that this necessarily is achievable during our normal studio hours, it is plausible that our online day, currently Friday, could take longer than anticipated. We will discuss any and all issues that may arise as a class to come to a consensus that works for as many as people as possible. Additionally, this semester is primarily 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 present in a shared environment; the establishment of a strong co-working relationship 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@uncc.edu) or to make an appointment to talk with her.

**Attendance Principles**

The authority to excuse a student's class absence(s) and to grant a student an academic accommodation (turn in a late assignment(s), provide extra time on an assignment, reschedule an exam(s) etc.) sits with the individual instructor. During the course of the COVID-19 pandemic, there may be a variety of reasons why students might struggle attending class and/or completing assignments including but not limited to: positive COVID-19 test result or symptoms of COVID-19, quarantine due to possible or confirmed COVID-19 exposure, or care for someone who is ill. With the high proportion of remote work during this period, there may also be complications with reliable access to computers or the internet. n light of these circumstances, instructors will keep the following principles in mind:
• Stay Home if Sick. Institutional guidance for all members of the UNC Charlotte community is to remain home if you are sick.
• Attend class when it's safe (no symptoms, no positive diagnosis and are not in quarantine).
• If there is a need to quarantine, remote course participation is important for all involved.

• Students are expected to attend every class and remain in class for the duration of the session when it is safe to do so in accordance with university guidance regarding COVID-19.
• An absence, excused or unexcused, does not relieve a student of any course requirement.
 • Do not come to class if you are sick. Please protect your health and the health of others by staying home. Contact your healthcare provider if you believe you are ill.

For absences related to COVID-19, please adhere to the following:
• If you are sick: If you test positive or are evaluated by a healthcare provider for symptoms of COVID-19, complete this form to alert the University. Representatives from Emergency Management and/or the Student Health Center will follow up with you as necessary, and your instructors will be notified.
• If you have been exposed to COVID-19 positive individuals and/or have been notified to self-quarantine due to exposure, complete this form to alert the University. Representatives from Emergency Management and/or the Student Health Center will follow up with you as necessary, and your instructors will be notified.
• To return to class after being absent due to a COVID-19 diagnosis or due to a period of self-quarantine, students should submit an online request form to Student Assistance and Support Services (SASS). Supporting documentation can be attached directly to the request form and should be from a student's health care provider or the Student Health Center, clearly indicating the dates of absences and the date the student is able to return to class. Instructors will be notified of such absences.
• If you are absent from class as a result of a COVID-19 diagnosis or quarantine, as instructor I will do the following to help you continue to make progress in the course: maintain regular communication through our online resources (email), provide remote learning options for course participation (such as Google Chat, shared folders, etc.) and I will modify course assignments if needed on a case by case basis.

**Attendance (Physical)**

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.

**Attendance (Remote)**

Attendance on remote days, currently Fridays, are more difficult. I do not expect everyone to sit through a 4 hour Zoom call. I will require each student (group) to participate in the discussions for the groups on either side of them in the schedule. For example if you are scheduled for a 3:30 discussion time you are required to attend and participate in the discussions for both the 3:00 and 4:00 group. Each week a new scrambled schedule will be provided so you will not be seeing the same groups work each week and your time will not be consistent. You need to ensure you are available for the entirety of the scheduled studio time. Obviously, the first scheduled time and last scheduled time will not be able to fit this by the letter, the scrambled schedule will ensure that everyone benefits from this reduction.

**Attendance (Reviews)**

Failure to attend or present your project at a review will result in the immediate reduction of a full letter grade (10% of your final aggregate grade) 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 project / 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. All presentations will be done digitally and remotely.

**COVID-19**

Obviously, these times are unprecedented. I take attendance very seriously, but the health and safety of my students, friends, family and myself exceeds all other considerations. Should you feel ill, be in contact with someone who is ill or has been in close contact with someone who has been diagnosed  with COVID-19. You are to work remotely for the CDC recommended time. University policy on this item will prevail, which can be found on the university website. In short, we are all adults who shall respect and preserve the health of all those around us. Be smart and be open in your communication, with your group member, class mates and especially with your instructor. We will get through this as a society, as a university, college, school and class - together.

**Face Coverings**

I understand that wearing a mask is uncomfortable, hot and can make communication a bit more difficult but, we must wear masks at all times - regardless if we are within six feet of one another or not.

It is the policy of UNC Charlotte for the Fall 2020 semester that as a condition of on-campus enrollment, all students are required to engage in safe behaviors to avoid the spread of COVID-19 in the 49er community. Such behaviors specifically include the requirement that all students wear a mask while in buildings including in classrooms, labs, and in other instances where social distancing is not possible. Students are permitted to remove masks in classroom or lab settings only when explicitly granted permission by the instructor to do so (such as while asking a question, participating in class discussion, or giving a presentation) and while at an appropriate physical distance from others. Failure to comply with this policy in the classroom or lab may result in dismissal from the current class session. If the student refuses to leave the classroom or lab after being dismissed, the student may be referred to the Office of Student Conduct for charges under the Code of Student Responsibility.

**Keep Your Hands to Yourself**

Lets all be mindful not to touch one-anothers stuff, this would include drawings, pens / pencils, computers, desks etc. We will work together to find a way to communicate all of our ideas.

**A Note on 2020**

Nobody signed up for this
- Not for the sickness, not for the social distancing
- Not for an online studio, not for teaching or remotely, not for varied access to learning materials

We are going to prioritize supporting each other as humans
- We are going to prioritize simple solutions that make sense for the most
- We are going to prioritize sharing resources and communicating clearly

We cannot just do the same thing online so it is time to be creative
- Some assignments are no longer possible
- Some expectations are no longer reasonable
- We will attempt multiple ways to address course content but not all will be equally successful

We will foster intellectual nourishment, social connection, and personal accommodation
- Accessible asynchronous content for diverse access, time zones, and contexts
- Synchronous discussions to learn together and build community

We will remain flexible and adjust to the situation
- Nobody knows where this is going and what we'll need to adapt
- As the Brazilians say, it will get done and it will be great

**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**

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.

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 or via Zoom. 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.

**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-ongoing 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):

1. Case Study - "Process Leads to Product" (10%)
2. Design Project (75%)((includes reviews))
   a. Narrative, Basic Programming, Concept and Schematic Design
   b. Integrated Design Development
   c. Final Design Development, Detailing and
3. Process + Final Product Documentation (5%)
4. Participation, Process + Diligence (10%)

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 Participation, Process + Diligence area and on the Case Study Project.

**Culture + 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 polices, 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, tabloids, 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 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 recommend 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.

**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.

**Schedule**

A live schedule is on the course website listed at the top of this document