ARCH 196: ARCHITECTURE STUDIO II

SPRING 2024

Studio Monday and Thursday: 1:00pm-5:20pm
Workshops-Lectures-Tutorials

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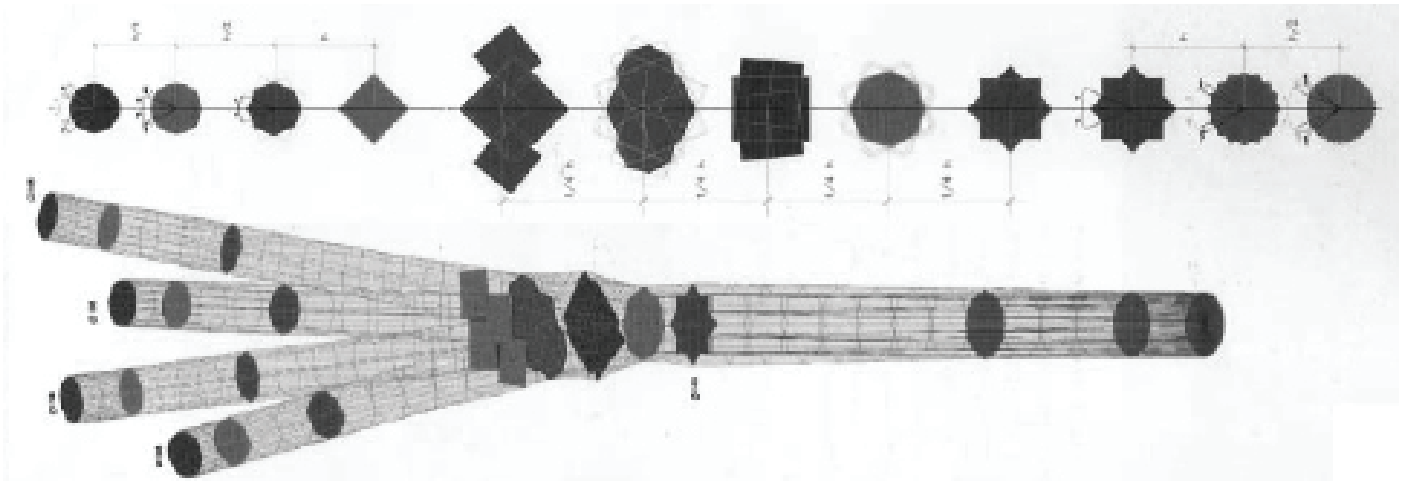


OVERVIEW

Successful learning requires three things, curiosity, discipline, and precision. This course is designed to introduce you to the fundamentals of architecture, through the iterative process of making. The studio is conceived as a series of interrelated exercises that will introduce you to a range of architectural issues, new tools, and techniques. Assignments will build upon the fall semester. Each project will provide you with an opportunity to synthesize the material, conceptual and the technical, within the arena of cultural practice.

We will focus on a shared work ethic that situates technology at the core of our design thinking. In order for technology to work it often makes familiar things strange, even the most common aspects of our digital tools like the paper cutter files can become sites of wonder and opportunity. We will focus on using these tools precisely while exploring ways of putting them to new uses. In order to approach these questions, the studio consists of weekly exercises that gradually become more detailed. By the end of this semester, you should have a clear understanding of the principles that constitute architectural design. Moreover, you should also have awareness for the issues that are central to both the profession and our discipline.

CONTENT

How can we arrive at a definition of the architectural concept of 'nature' today? In an era of post-natural thought, climate instability, global histories and post-colonial activism, the idea of nature as it has been explored in architecture often appears antiquated.

-NATURE David Gissen (AA Files 76, 2019)

On meaning, imagination and reason

A schema consists of a small number of parts and relations, by virtue of which it can structure indefinitely many perceptions, images and events. In sum, image schemata operate at a level of mental organization that falls between abstract propositional structures, on the one side, and particular concrete images, on the other.....
In order for us to have meaningful connected experiences that we can comprehend and reason about, there must be pattern and order to our actions, perceptions and conceptions.

- Mark Johnson, in Bernard Tschumi Architecture In/Of Motion.

The semester consists of a sequence of exercises which are conceived as a series of interrelated stepping stones. Subsequent projects provide a departure point for the next set of questions while allowing for a fresh start. Each exercise addresses a specific disciplinary problem related to architectural design. The scope of the investigations involve material systems, ordering systems, structure, movement, and public & private space.

As a frame of reference, the studio will borrow Adrian Forty's definition of nature as a point of departure to re-examine the concept of 'nature' today as it relates to architecture and the built environment. In doing so it will allow students to reconsider the way we conceive of and shape the built environment.

The objective is to posit design as a means to exploring new relationships of 'architecture' and 'nature' that move beyond a form of "nature-materialism" (Gissen). In other words how can design provide architecture with the capacity to address the current challenges facing the planet today by re-examining the intersection between human behavior, culture, and what we call the 'natural' environment.

The studio projects are setup to build upon methods and tools that were established in the fall semester and as such the students should look for opportunities to refine their design skills and their individual design process. The lessons from the fall, 2D-3D Unfold, Silhouette, Volume within a Volume, and Shelter, will be revisited and it is expected that those skills will be employed more fluidly while addressing a new set of questions.

Lectures will focus on key terms and connect the studio objectives to architectural history, theory and the broader realm of cultural practice. Readings will provide terminology and theoretical grounding with the discipline to be explored through the activity of design.

With the addition of Arch156 Tools and Techniques II class the studio will be less focused on software than before. Better command of the tools, improved model making and drawing skills will be necessary to successfully complete the assignments. The skills learned in Arch110 Tools and Techniques I will be used and built upon in order to be successful throughout the semester.

MEDIA
The teaching of media and digital tools will be advanced through Arch156 Tools and Techniques II. The semester has been structured to cultivate a culture of making, through modeling with a variety of materials as a shared medium to explore space, tectonics, surface and volume. Each studio will have access to a Cri-cut digital paper cutter.

Each studio section and their faculty Instructor is responsible for the maintenance and safety of the Cri-cut from vandalism and/or theft.

To expedite the transformation and unfolding of 3d objects we will use Pepakura (https://tamasoft.co.jp/pepakura_designer/). Each student is required to install their own version. Rhino will be available on the network for students who have purchased the school HCAD computer. Students are encouraged to purchase their own educational copy of Rhino and Adobe Photoshop, Illustrator, and In-Design, although this is not required these are the primary software that will be used for each assignment.

APPROACH & OBJECTIVES

Precision: As Frank Lloyd Wright stated, "Consistency from first to last, will give you the result you seek and consistency alone." Everything you make, whether it's the first paper model or the last it should be approached with the same level of care and precision. The same ethic will apply to development of concepts, tools and measurement. Learning to articulate an idea clearly requires concise communication skills. Central to this is the effective use of drawings to convey ideas. The studio will focus on the representation of ideas and concepts that can be drawn and modeled, in favor of those that are spoken. This will require an understanding of the ways architects communicate intent through drawings and the 1:1 relationship that is shared between form and its representation.

Process-based tools: Design processes can be nuanced and often difficult to communicate or repeat. One of the keys to controlling the design process is being able to maintain consistency. Procedural form making refers to the use of a set of instructions that can be repeated by another author or builder to achieve the same results. Drawings and 3d models are one way that architects structure the use of their tools to maintain their architectural intent. Tools and methods such as orthographic projection, file conversion formats, scale and resolution are tools that insure fidelity. The studio will focus on developing a tool work flow for the effective transfer and sharing of information with collaborators and machines alike.

Design: Making and Re-Making: Architectural innovation does not descend upon us from the heavens. It can only develop through a process of iteration. Improvement and wisdom comes through reconsideration, revision and remaking. By its nature model making is a process of action. It is essential that you make things multiple times in order to improve them by incorporating revisions. Maintaining up to date paper templates will expedite the process. Engaging in a process of revision is often confused with the idea of starting over. Revision is a means to improving an idea rather than finding a new one. To this end it is important to anticipate how to make things in parts so that they can be modified without starting over. This is an essential part of craft – learning to anticipate and manage change.

Techniques + Technology: We will work with various types of materials, but primarily with sheets of paper. Your projects will be developed using software that have been specifically developed to manage three dimensional surfaces that are more similar to paper, such as Pepakura for unfolding. Rhino for 3d surfacing and meshing.

Conventions: The precise use of language is a necessary part of being able to share ideas. Architecture has adopted its own set of formal conventions, such as plans and sections, to deal with the design of buildings. Since the aim of these conventions is to represent things it can also lead to generalizations that cause us to resort to a world view that is formulated around ideals and habits that remove exceptions. This can present a significant challenge to our imagination. Learning how to design requires techniques to speculate on how to make things without reverting to ideals and types. While it might seem strange at first to insist on not calling a window a "window" but instead an "aperture" or "opening," the hope is that doing so will increase opportunities for you to conceive of things differently.

Constraints: Design ingenuity is a product of responding creatively to constraints. The built environment is situated within a variety of political, material and economic constraints, yet none are robust enough alone to constitute architecture. Each exercise will pose a set of measurable constraints, or relations that must be met. Their purpose is to guide your decision making process rather than dictate a solution. Successful designs will require you to develop an architectural idea that is conceptually independent yet related to the constraints of each project.

Communication of intent / Drawing as a language: Learning to develop a design requires a rationale for making decisions and a means for explaining your intentions. This allows for the understanding and development of ideas that extend your work beyond questions of taste and subjectivity. It also provides a framework for conversation and feedback. Each project will require you to be able to explain the objectives in your work, what you have made, and how you went about making decisions. Drawing is an integral part of establishing this dialogue is to assess whether the design intentions are being met and how they might be improved. Good communication is an essential part preserving your ideas and being able to argue for their significance.

SCHEDULE (subject to change)
January

Week 1
M 15 Holiday
Th 18 Introduction to 1st Year and EX1 Material Systems: Alumni Lecture Hall 1 (ALH)
Review Syllabus and EX1 with studio critic **(Coord. mtg. 1)**

Week 2
M 22 Studio | PIN UP: EX1: Exploratory physical models | Workshop Assigned | ***SUPER JURY***
Th 25 Studio | PIN UP: EX1: Iterative models and documentation

February

Week 3
M 29 **EX1 Due**
Th 1 Introduction EX2: Ordering Systems: Alumni Lecture Hall 1 (ALH) | **Coord. mtg. 2)**

Week 4
M 5 PIN UP: EX2 | Workshop Assigned
Th 8 Studio

Week 5
M 12 **EX2 Due** | **(Coord. mtg. 3)**
Th 15 Introduction EX3: JUST A PARK?

Week 6
M 19 PIN UP: EX3.1
Th 22 Studio

Week 7
M 26 **EX3.1 Due**
Th 29 Introduction EX3.2 Alumni Lecture Hall 1 (ALH) | **(Coord. mtg.4)**

March

Week 8
M 4 Studio | Workshop Assigned
Th 7 Studio | PIN UP: EX3.2 Due

Week 9
10- 16 Spring Recess

Week 10
M 18 Studio | ***Mid-term warnings and feedback***
Th 21 Studio PIN UP: **EX3.2 Revisions Due**

Week 11
M 25 Introduction EX3.3 Alumni Lecture Hall 1 (ALH) | Workshop Assigned
Th 28 Studio

April

Week 12
M 1 Studio | PIN UP: EX3.3 Due | ***Last Day to Withdraw***
Th 4 Studio

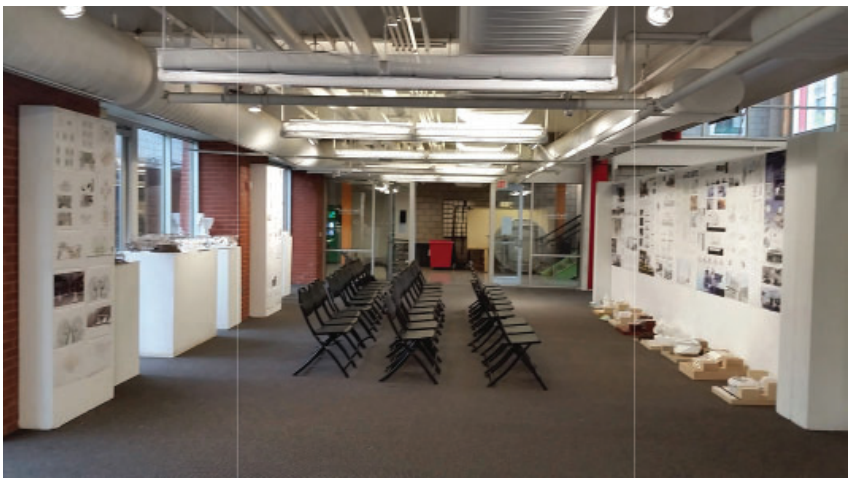
Week 13
M 8 **PIN UP: EX3.3 Design Development Review**
Th 11 Studio

Week 14
M 15 Studio
Th 18 Studio

Week 15
F 19 **EX 3.3 Final Submission Due**
M 22 FINAL REVIEW WEEK
Th 25 FINAL REVIEW WEEK

May

M 29 FINAL REVIEW (SUPER JURY)
T 30 ***Last Day of Classes***



SUPER JURY SPRING 2019

TYPICAL WEEKLY STRUCTURE
This schedule is a generalization and subject to change, week to week. At this time Instruction is scheduled to be face-to-face, but if this changes the course format will be altered accordingly. All students should be prepared for on-line synchronous learning and have the following;

COMPUTER:
Access to a computer with high speed internet connection, Webcam, microphone and audio, and Windows/Apple operating system is required. (Webcam and Windows/Apple operating system is required). Access to a printer is necessary to facilitate model making.

Monday
1:00pm-5:20pm: Pinups, small group discussions, peer reviews, sketch assignments, joint studio reviews of completed assignments.

Thursday
1:00pm-5:20pm: Studio-wide meetings to review assignments, lectures, tutorials, related concepts, vocabulary, suggestions for beginning an assignment, previous examples, and general questions. In studio meetings for individual discussions, group discussions, pinups of exercises in progress, tutorials, etc. Use studio time to work on your project and make sure that you know what to do over the weekend. Use the weekend to work in studio or at home in order to complete the exercise. Most assignments are due each week at the beginning of studio on Monday.

NOTE: Students are required to check in with the Peer Mentors weekly. The Peer Mentors will provide students with a variety of means to accomplish this task.

WORK HABITS
One part of a designer's skill set includes the cultivation of habits of mind around production, work, and one's work environment. To that end, it is important, as much as possible, to see your work as something separate from yourself. This is not always easy, as we are all personally invested in our projects. However, in order to get the most out of the studio, try to remember that the discussions and feedback are directed toward your work, not toward you as a person. During discussions in the studio, as well as studio-wide presentations, we encourage you to become a more active listener. You should always have a pencil and your sketchbook with you. Use it to record the important ideas, feedback, and thoughts you have about the conversation, or about your own project. Use the process of taking notes as a way to practice drawing and to "think" graphically. For example, during the lecture, try to draw each image that you see and annotate it with notes about its important properties. We also encourage you to actively engage in the culture of architecture more generally via the library, websites, site visits, museums, lectures, events, visits to New York City, and so on. Your sketchbook is a fantastic way to collect and process this material. Perhaps this seems obvious, but it bears repeating that the sketchbook can become one of the designer's most powerful tools.

STUDIO SPACE
Working together in the studio is a special part of the experience of a design education. Please take responsibility for the studio environment and the people working in it. Be respectful and courteous of your colleagues and please be aware that everyone might have different ideas of what a productive workspace might be. We are entrusting you as the stewards of the studio spaces for the coming year and ask that you inhabit the space with respect, courtesy, and common sense. Practically, this means taking care of the facilities and taking responsibility for the quality and safety of the space. For example, please maintain the cleanliness of your studio, clean up after yourself when using common areas, **do not prop doors open,** etc.

If someone or something is making you uncomfortable in the studio, please let your instructor know, your advisor, or another member of the NJIT community. Below are a few helpful resources:

NJIT Center for First Year Students: http://www.njit.edu/orientation/
NJIT Center for Counseling and Psychological Services (C-CAPS): http://www.njit.edu/counseling/

LEARNING AND TEACHING CULTURE POLICY
In addition to the overarching values and ethics of the university, the New Jersey School of Architecture is dedicated to optimism, diversity and solidarity, professional conduct, constructive evaluation and instruction, collaborative community, health and wellbeing, time management and school-life-work balance, respectful stewardship and space management, and well-rounded enrichment. The pedagogy of architecture and design is as complex as it is rewarding, and as dynamically evolving as the people who learn and teach it. This understanding resides at the core of the NJIT Learning and Teaching Culture Policy: https://design.njit.edu/learning-and-teaching-culture-policy

ATTENDANCE AND TARDINESS POLICY
1) Excused Absences:
Are for medical and religious reasons or pre-approved for student-athletes only. An absence due to illness can be excused if the student has filed official documentation (licensed medical practitioner including NJIT Health Services) with the Office of the Dean of Students. The Office of the Dean of Students will, in turn, notify the instructor(s) that appropriate documentation has been received and confirmed, and detail what accommodation is warranted. These accommodations may range from identified dates for excused absences (normally for temporary illness) to extra time for projects and assignments (for ongoing medical issues). Students who expect to miss classes or exams because of religious observance must submit to their instructors, by the end of the second week of classes, a written list of dates that will be missed. Students are expected to make up missed work. Faculty are expected to make reasonable attempts to accommodate students who are appropriately following this policy.
For conflicts for student-athletes see Missed Class Policy at:
http://www.njithighlanders.com/documents/2014/8/7/2014_Book_08_7_14.pdf?tab=2014-15sahandboo

2) Unexcused Absences:
All undergraduates are expected to attend all regularly scheduled classes. Unexcused absences may result in a grade reduction due to a lack of participation in class workshops and assignments. Three or more unexcused absences will require a meeting with the instructor, coordinator, and advisor.
The instructor is under no obligation to repeat any missed information or provide access to lecture notes or presentation materials to students who arrive late. It remains the responsibility of the student to learn the material presented. University Attendance Policy for Undergraduate Students can be found at:
https://catalog.njit.edu/undergraduate/academic-policies-procedures/

ARCHIVING WORK: CANVAS + KEPLER
All students are required to post a selection of images of each exercise on Canvas and to the on-line archive, Kepler. Kepler is now part of Canvas. Students should upload to folders that parallel the assignments page of Canvas in pdf format at the file size used for presentation. This is a fundamental part of the program and failure to post work could result in not receiving credit for the course. Your instructor will provide detailed information about this process.
File name: Student'sFirstName_ Student'sLastName
Please login at: canvas.njit.edu/ Additional Instructions will be forthcoming.

ACADEMIC INTEGRITY
Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working toward. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at:
https://www.njit.edu/dos/academic-integrity

Please note that it is your professional obligation and responsibility to report any academic misconduct departement. Any student found in violation of the code by cheating, plagiarizing, or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university. If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu.

PLAGIARISM
It is extremely important that students and faculty familiarize themselves with a proper way to cite visual and intellectual sources. Plagiarism weather deliberate or inadvertent simply cannot be tolerated. Simply put, plagiarism is the use of visual or intellectual material created by others without proper attribution. Even the use of ones own material for more than one assignment can also be considered plagiarism. Students should not do so without the expressed consent of all instructors involved.

Our librarian Maya Gervits has assembled excellent resources on copyright, plagiarism citing, and avoiding plagiarism: http://researchguides.njit.edu/c.php?g=671665&p=4727920

STUDENTS WITH DISABILITIES
It is the school's moral, ethical, and legal obligation to provide appropriate accommodations for all students with physical and/or learning disabilities. If students need an accommodation related to disabilities, all official documentation must be filed with the Dean of Students and the Disability Support Service Office. It is the responsibility of the student to notify the instructor at the beginning of the semester if accommodations are warranted.

Dean of Students: https://www.njit.edu/doss/
Office of Accessibility Resources and Services: https://www.njit.edu/accessibility/

EVALUATION
Evaluation is based on a number of factors including overall work quality, improvement, effort, ambition, initiative, and enthusiasm. Within the goals of the first year course, the exercises in studio are designed to allow you to demonstrate your understanding and your ability related to the objectives described in each exercise sheet. In almost every case, dramatic improvement of both understanding and ability through hard work, commitment, and initiative with be positively supported in terms of assessment. In other words, there are multiple routes to success.

In an effort to further clarify the grading policy, below are brief summaries of the kind of work appropriate to each grade, based on the NJIT undergraduate grading scale:

A (Superior)
Work demonstrates advanced understanding of learning objectives and a high level of execution in terms of production abilities. Work is reflective of an intensive process of development that goes above and beyond expectations. Work is connected to larger architectural discussions and pursuant of specific architectural aims. Deliverables demonstrate a high level of sophistication, craft, attention to detail, and willingness to explore a wide range of production techniques. Work is further supported by advanced levels of independent initiative and library research. It is very hard to get an A but does not require previous experience or skills.

B+ (Excellent) / B (Very Good)
Work demonstrates excellent understanding of learning objectives and a very good level of production abilities. Work is reflective of a process of development that generates multiple alternatives, assesses, selects, refines, and so on. Deliverables demonstrate a high level of sophistication, craft, attention to detail, and willingness to explore a wide range of production techniques. Work is further supported by independent initiative and investigation as well as active participation in the studio and consistent engagement of course material (i.e. readings, lectures, site visits, etc.). It is hard to get a B+ / B but does not require previous experience or skills.

C+ (Good) / C (Acceptable)
Work fulfills the requirements of each exercise in terms of conceptual understanding and technical ability. Work takes few risks and has some engagement with an iterative design process. Deliverables demonstrate a good level of craft and are carefully made (i.e. drawings are legible and correct, models are carefully cut and cleanly assembled) / Work demonstrates basic level of independent initiative. Work improves over the course of the semester and reflects a genuine effort to improve in ability and understanding.

D (Minimum)
Work barely fulfills the requirements of each exercise in terms of conceptual understanding and technical ability. Work process is not evident. Deliverables demonstrate poor development of craft and / or do not demonstrate improvement over the course of the semester. Work demonstrates no additional initiative or engagement.

F (Failing)
Work is incomplete and does not demonstrate an understanding of the course content or abilities related to required skills.

Incompletes are only granted in the event of a documented medical or family emergency, and must be approved by the instructor, coordinator, and advisor. NJIT issues mid-term warnings for students who are not performing at a satisfactory level. Any student issued a warning will be required to have a conference with the instructor to evaluate satisfactory completion of the work for the semester. At any point during the semester students can arrange to meet with the instructor to inquire how their performance is progressing and how they may improve. Final grades will be discussed in person at the end of the semester. All students are expected to adhere to the University Code on Academic Integrity and to the Code of Student Conduct. Please take the time to read and understand both of these documents(see links are provided above). Any violations will be brought to the attention of the Dean of Students.

INDIVIDUAL ASSIGNMENT GRADING
P1 15% P2 15% P3 60% (Part 3.1:10% Part 3.2:15% Part 3.3: 35%)

Class participation + workshop assignments: 10%
- each studio critic will be giving supplemental workshop assignments, sketching assignments and/or reading assignments over the course of the semester.

NOTE: Kepler is a digital archival system that each student is required to upload completed work. If work is not uploaded students WILL NOT receive a grade at the end of the semester.

Course Reference Required Readings
Readings will be posted on CANVAS

Stan Allen:	*Diagrams Matter*
David Gissen	*Nature (AA Files 76, 2019)*
Simitch and Warke	*the **language** of **architecture***

Albert Dorman Honors College Students
In order to satisfy some of the enhancement requirements, honors students are encouraged to participate in the creation of TRANSECT, a publication featuring exemplary work across first year. A description of student responsibilities will be distributed separately from this syllabus.

NAAB GUIDELINES

Each assignment will require students to demonstrate ability and understanding in specific areas of architectural design. The National Architectural Accrediting Board (NAAB) has developed Conditions for Accreditation to maintain educational consistency in student learning objectives and outcomes. A program must demonstrate how it addresses the following criteria through program curricula and other experiences, with an emphasis on the articulation of learning objectives and assessment.

Course Learning Outcomes

This course will guide students to achieve the following competencies:

* Explore and demonstrate understanding and ability of basic skills of representation and communication in the form of 2D and 3D media and the written word.
* Demonstrate critical thinking skills and methods of research, observation, analysis, and evaluation.
* Development of architectural design skills demonstrating basic organizational and environmental principles to determine form
* Demonstrate understanding and abiity to use ordering systems and precedents to examine and apply in service of the development of design projects.
* Demonstrate the ability to work collaboratively with others understanding diverse points of views and social contexts in the design of the built environment
* Demonstrate an awareness of the relationship between the natural and built environment and the responsibility architecture as a discipline has to address issues around climate change.

The National Architectural Accrediting Board accredits NJIT's architecture program. The NAAB has Program and Student Criteria that must be covered by any architectural curriculum to attain their approval. This course satisfies the following criteria:

PC.2 Design - How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors in different settings and scales of development, from buildings to cities.

PC.3 Ecological Knowledge and Responsibility - How the program instills in students a holistic understanding of the dynamic between built and natural environments, enabling future architects to mitigate climate change responsibly by leveraging ecological, advanced building performance, adaptation, and resilience principles in their work and advocacy activities.

PC.6 Leadership and Collaboration - How the program ensures that students understand approaches to leadership in multidisciplinary teams, diverse stakeholder constituents, and dynamic physical and social contexts, and learn how to apply effective collaboration skills to solve complex problems.

PC.7 Learning and Teaching Culture - How the program fosters and ensures a positive and respectful environment that encourages optimism, respect, sharing, engagement, and innovation among its faculty, students, administration, and staff.

PC.8 Social Equity and Inclusion - How the program furthers and deepens students' understanding of diverse cultural and social contexts and helps them translate that understanding into built environments that equitably support and include people of different backgrounds, resources, and abilities.

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.

NAAB GUIDELINES

The National Architectural Accrediting Board accredits NJIT's architecture program. The NAAB has Shared Values of the Discipline and the Profession that must be covered by any architectural curriculum to attain their approval. This course satisfies the following shared values:

1. Design: Architects design better, safer, more equitable, resilient, and sustainable built environments. Design thinking and integrated design solutions are hallmarks of architecture education, the discipline, and the profession.
2. Environmental Stewardship and Professional Responsibility: Architects are responsible for the impact of their work on the natural world and on public health, safety, and welfare. As professionals and designers of the built environment, we embrace these responsibilities and act ethically to accomplish them.
3. Equity, Diversity, and Inclusion: Architects commit to equity and inclusion in the environments we design, the policies we adopt, the words we speak, the actions we take, and the respectful learning, teaching, and working environments we create. Architects seek fairness, diversity, and social justice in the profession and in society and support a range of pathways for students seeking access to an architecture education.
4. Knowledge and Innovation: Architects create and disseminate knowledge focused on design and the built environment in response to ever-changing conditions. New knowledge advances architecture as a cultural force, drives innovation, and prompts the continuous improvement of the discipline.
5. Leadership, Collaboration, and Community Engagement: Architects practice design as a collaborative, inclusive, creative, and empathetic enterprise with other disciplines, the communities we serve, and the clients for whom we work.

In addition the First Year Architecture Design Studio I students will be required to demonstrate understanding and ability at an introductory level in the following subject areas;

I. Site Conditions: Access, Topography, Scale, Materiality, Historical and Cultural Context.
- To what degree does the design respond to environmental conditions of the site including: solar orientation, seasonal variation, variations in weather, sunlight, wind, precipitation, etc.?

II. Measurable Environmental Impact: Water Conservation, Renewable Energy Sources.
- Does the design have an overall positive effect on the natural and built environment?

III. User Requirements: Program Development, Circulation, Functional Relationships.
- Is the circulation system logical, functional and clearly understood?
- Are the rooms and spaces appropriately sized and proportioned?
- Are the various rooms and spaces designed for their specific use?

IV. Regulatory Requirements: IBC 2018: Natural Light, Ventilation and Stair Design
- Does each room or space have natural light and appropriate to its function?
- Does each room or space have natural ventilation or fresh air and appropriate to its function?

V. Accessible Design: Americans with Disability Act Code: Ramp Slopes and Wheel Chair Access
- Does the circulation system within the building meet general ADA requirements including ramps.

VI. Life Safety Systems: Minimum Egress Paths
- Does the circulation system within the building ensure safe egress?

VII. Structural Systems: Foundations, Load Bearing Elements, and Building Lateral Stability
- Is the structural system, all elements working together, proven to be stable?

VIII. Environmental Control Systems: N/A

IX. Building Envelope Systems and Assemblies: Enclosure Systems
- Does the building envelope function properly and visually enhance the design intent?
- Is the building envelope appropriate to its seasonal variation, and solar access shading, etc.?

X. Measurable Building Performance: Daylighting, Building Orientation, and Solar Access
- Does the design provide accurate design of solar orientations and design for day lighting?