Course: ARCH 51000: Advanced Studio
Schedule: MO/TU/TH 3:00PM - 7:10PM
Instructor: John Patrick Cunningham, RA
email: jcunningham1@ccny.cuny.edu
phone: 630-217-4498
ig: @the.midwesterner
Location: https://zoom.us/j/473705541
Meeting ID: 473 705 541
Semester: Spring 2020

DELAMINATED TECTONICS

ESSENTIAL RESIDENTIAL PROPOSALS FOR A NEAR-FUTURE NEW YORK

PREMISE

A city is an accretion of millions of separate ideal urban visions, amassed over centuries. This evolution, a constant procedure of cutting, hybridizing, and rebuilding, defines great metropolises; continuously reusing and reformatting generations of buildings in combinations befitting the current place in time. It is what gives cities their morphological distinctions and historical legibility. Our responsibility as architects is to cultivate this process by fusing old with new, pushing an agenda that progresses the built environment not as a series of technology or style-driven schisms, but as a continuum.

To proliferate this process, we must confront two questions: first, how do we continue to adapt and reuse buildings and urban structures while maintaining their vitality? All constructions have inherent value beyond their historical significance, simply in that they exist, and were an expenditure of finite resources. New York City alone produces over 3 million tons of construction waste annually, only 35% of which is returned to the production stream. Second, how can we design new buildings and urban structures that simplify this regenerative process? What if we considered buildings not as bespoke objects with 50-year lifespans, but as pieces of infrastructure designed to last 500 years? These structures could function more like frameworks into which new architectures, designed for disassembly, could periodically be added, subtracted, and combined over time. Such lines of thought facilitate further questioning pertaining to land ownership, building subdivision, vertical growth, and the definition of enclosure.

The availability of affordable, high-quality housing is one of the most pressing infrastructural needs facing New York City today. Given the outrageously high costs of real estate and construction, new residential units are often built at an

elite price point. Further, while the density regulations of New York City's zoning resolution are designed to protect the health and welfare of tenants, they are outdated and do not reflect the current needs of the city, namely a maximum quantity of smaller units. Finally, 60% of New York's existing rental stock is 2-bedroom or larger, while 73% of the city's residents are single or in childless couples. This disparity results in multiple income-earning adults living in units designed for families, increasing the rental potential, and thus the rent, of those units, making affordability harder for everyone.

PROPOSAL

Students will employ the concepts of Adaptive Reuse and Design for Disassembly in developing bold concepts for rental housing in Brooklyn, fusing existing structures with new architectures to construct a cohesive whole. The project will progress on several fronts:

1. Zoning **-** Students will conduct a full zoning analysis of the sites, and make proposals for unit mixes based on their research.

2. Planning **-** Proposals for unit layouts, mixes, vertical circulation, and public space will be novel, experimental, and reflective of how people inhabit New York City in 2020.

3. Assembly **-** The structures, facades, circulation, partitioning, and furnishing of these proposals will be designed to accommodate changing tastes, needs, and living habits over the next 100 years. Time will be a critical component.

4. Context **-** Students must consider the historic district in which the site exists, and develop architectures that not only give respect to this context, but also present themselves as contemporary solutions to structure and enclosure.

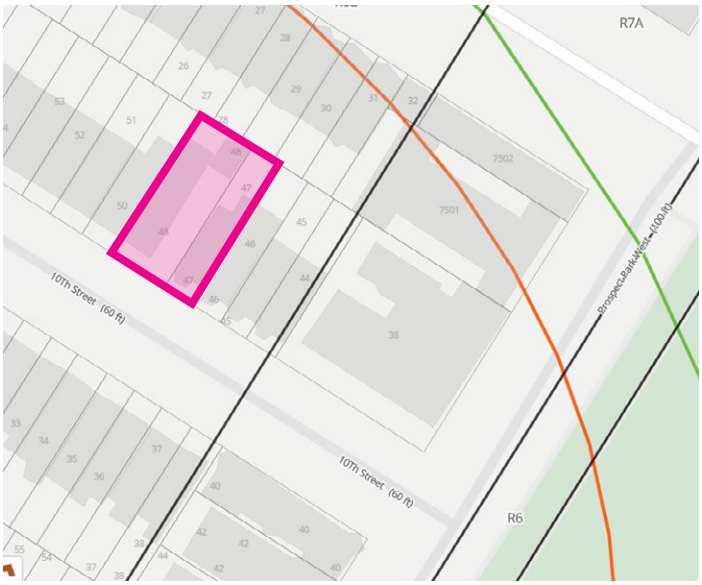
SITE

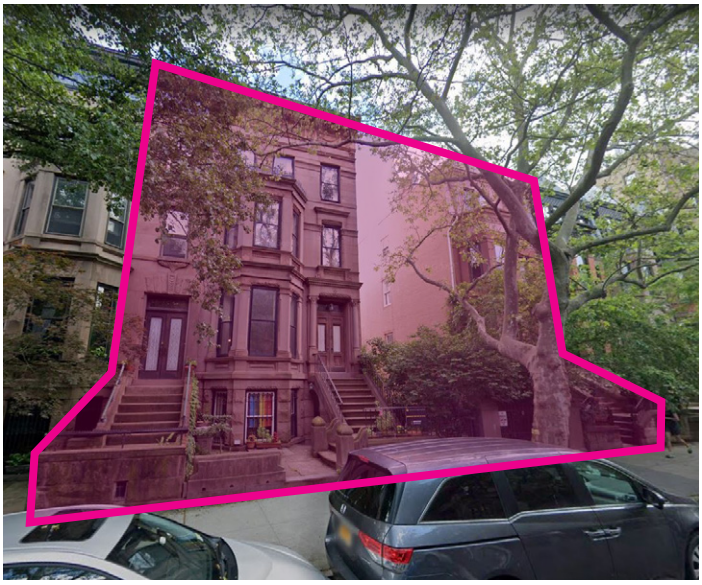
683 & 687 10th Street, Brooklyn.

We will combine the lots to create a single structure, using the side yard between the existing buildings as the central point of connectivity.

REQUIRED READINGS

Aldo Rossi: The Architecture of the City 29-32, 126-131
Tom Daniel: *' The Letter of the Law'* from Interstices 08
Hannah Wood: *'Recycled Buildings'* from Archinet, 2018
Brad Guy: Design for Disassembly in the Built Environment





SCHEDULE: MO/TU/TH 3:00PM - 7:10PM

Note: schedule below is subject to revision through the duration of the semester.

W1

Mon 06.01	First Studio Meeting Assign Exercise 1 - Warm Up Assign Exercise 2 - Precedent
Tue 06.02	Class Pin Up
Thu 06.04	Small Group Crits

W2

Mon 06.08	Present Exercise 1 Present Exercise 2 Assign Exercise 3 - Zoning
Tue 06.09	Group Pin Up
Thu 06.11	Small Group Crits

W3

Mon 06.15	Present Exercise 3 Assign Exercise 4 - Housing
Tue 06.16	Desk Crits
Thu 06.18	Small Group Crits

W4

Mon 06.22	Desk Crits
Tue 06.23	Small Group Crits
Thu 06.25	Class Pin-Up

W5

Mon 06.29	Desk Crits
Tue 06.30	Small Group Crits
Thu 07.02	Exercise 4 Mid - Review

W6

Mon 07.06	Desk Crits
Tue 07.07	Small Group Crits
Thu 07.09	Class Pin-Up

W7

Mon 07.13	Desk Crits
Tue 07.14	Small Group Crits
Thu 07.16	Class Pin-Up

W8

Mon 07.20	Mock Pin-Up
Tue 07.21	Optional Desk Crits
Wed 07.22	Final Review

EXERCISE 1 - OLD / NEW

Assigned - June 1
Due - June 8

Select an aged object. This object can be natural or man-made, and can come from your home, or out in the street / park / dumpster. Select your object carefully. It should posses some aesthetic quality of patina, decay, or wabi-sabi, to which you are drawn.

Impose an intervention upon this object, architectural in nature. Contrast materiality, color, structure, and form, to both call out differences between old and new, and to further unify them.

Rules:

. The object must be deliberately oriented and its contact with the intervention must be designed and intentional. The composition's engagement with your table must be equally thoughtful.

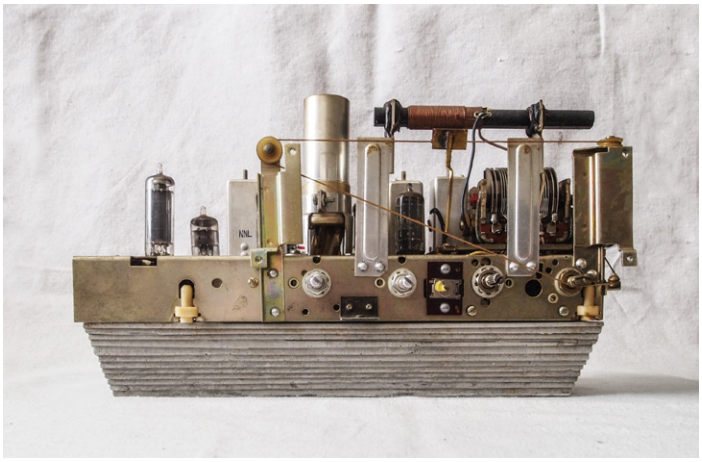
. While you may use any materials for the intervention, its components must be deliberately sized and shaped for their purpose.

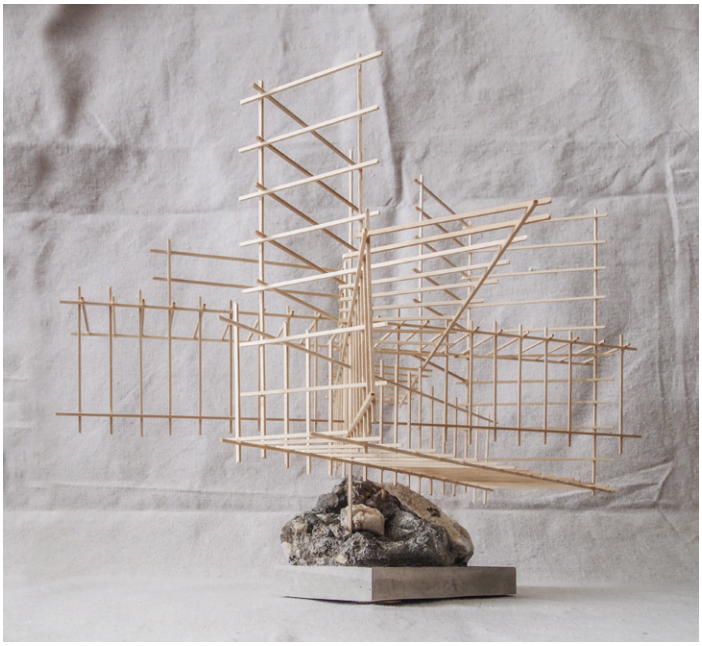
. The overall assembly should be experimental.

. The intervention should respond to the weight, geometry and identity of the object in a thoughtful and explicit manner.

FINAL DELIVERABLE

. Physical object
. High quality photos of the object





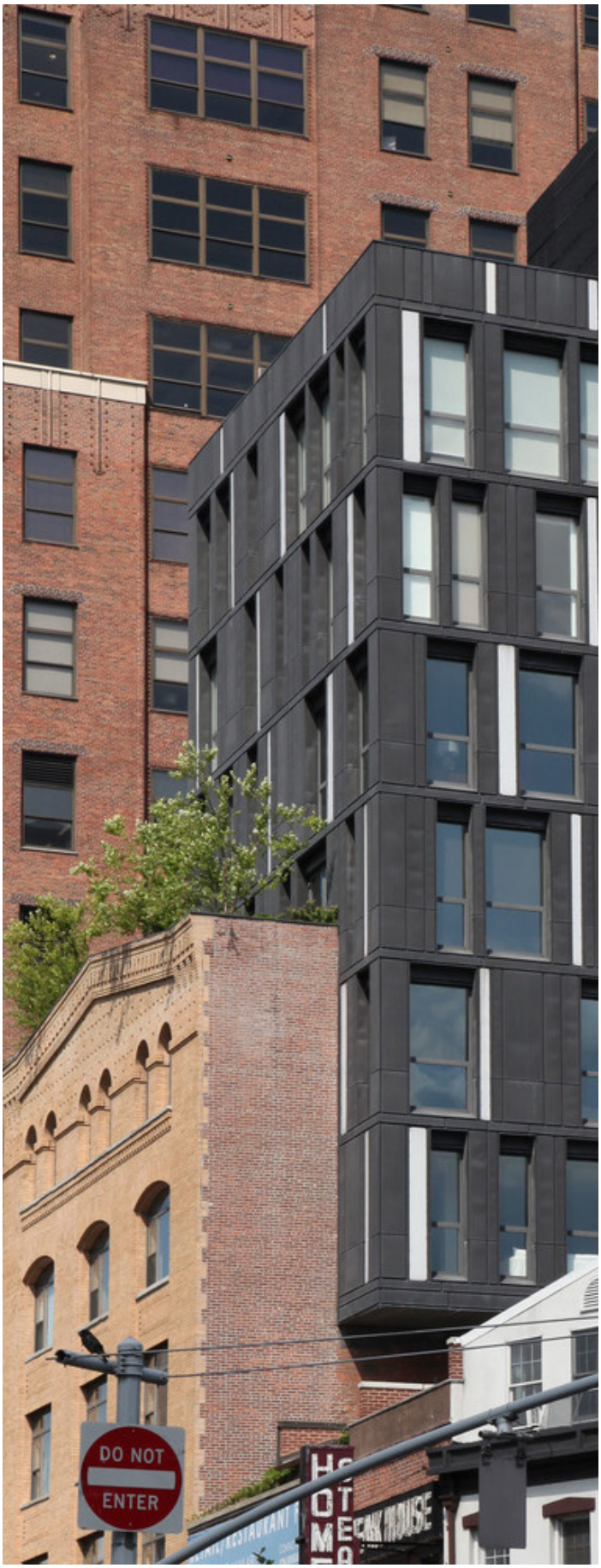
EXERCISE 2 - PRECEDENT

Assigned - June 1
Due - June 8

Conduct an extensive analysis of a residential project of your choosing. It must be from the 21st century, and ideally involves the re-use of an existing structure. Understanding contemporary space planning is key to our proposals, so your precedent must have extensive documentation.

FINAL DELIVERABLES

. Narrative description of project
. Plans
. Sections
. Photographs
. 1 diagram of your choosing



EXERCISE 3 - ZONING ANALYSIS / PROPOSAL

Assigned - June 8
Due - June 15

Conduct a comprehensive analysis of the two sites, with the assumption that they will be converted into a single site. The analysis should contain at least all of the information provided in the chart below. This information will enable you to maximize both the square footage of the site, along with the quality of the space therein.

Your research should also include an assessment of the physical and environmental qualities of the site, the block, and the surrounding neighborhood.

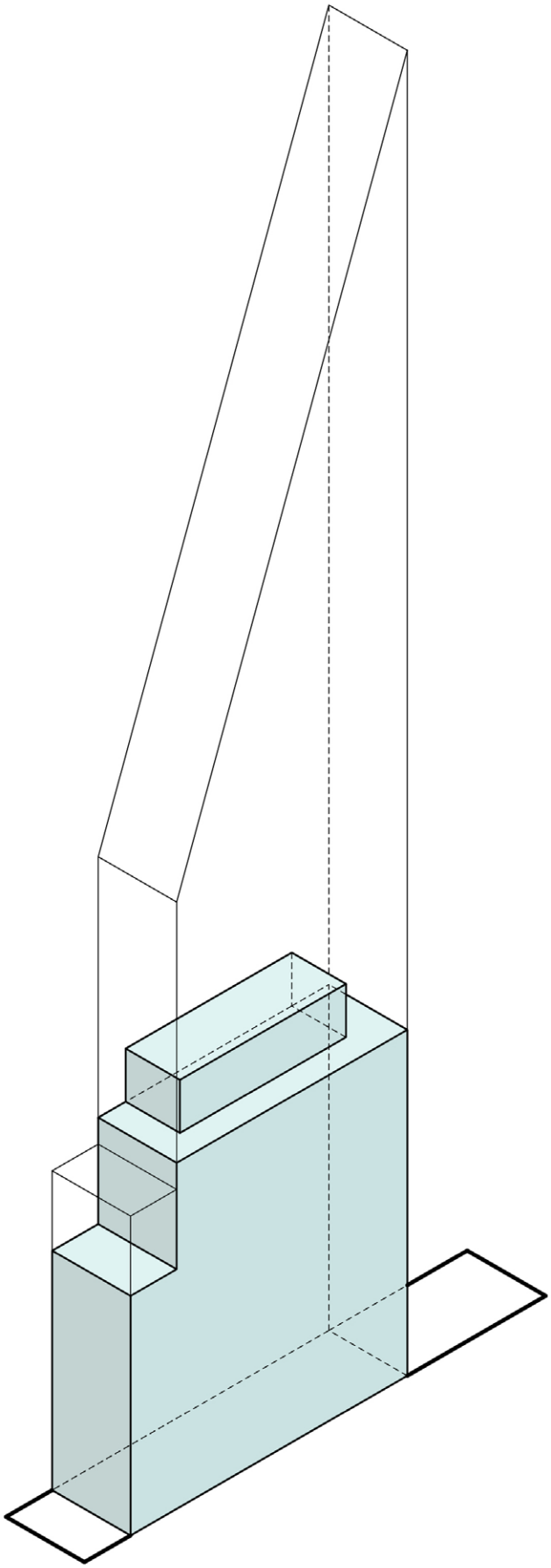
Once you fully understand the potential of the site, you are to make a basic proposal. This proposal should include: Basic massing of your envelope, # floors, # units, unit mix.

For basic zoning information: https://zola.planning.nyc.gov
New York Zoning Resolution: https://zr.planning.nyc.gov

FINAL DELIVERABLES

. Isometric / axonometric drawing to include full zoning envelope, with massing envelope and floors superimposed
. Diagrammatic output of
  . the physical and environmental qualities of the site, block, neighborhood
  . Zoning information
  . Massing, # floors, # units, unit mix

Zoning	*R7-2*	
Lot Frontage	*17'*	
Lot Area	*100'*	
FAR (Quality Housing)	*3.44*	
	Allowable	**Proposed**
Maximum Lot Coverage	*65% (1083s.f.)*	*64% (1068s.f.)*
Maximum # of Dwelling Units	*8 (5728 / 680s.f.)*	*12*
Minimum Unit Size	*300s.f.*	*240s.f.*
Front Yard Setback (Quality Housing)	*Match Adjacent (10')*	*10'*
Side Yard Setback	*0'*	*0'*
Rear Yard Setback	*30'*	*30'*
Maximum Street Wall Height	*60'*	*45'*
Floor Area (Quality Housing)	*5728s.f.*	*5498s.f.**
*** Quality Housing Deductions**		
Elevated ground floor (+5')	*500s.f.*	
Refuse Storage	*72s.f.*	
Laundry Room	*70s.f.*	
Corridor Efficiency	*98s.f.*	
Total	*740s.f.*	
Base s.f.	*6238s.f.*	
s.f. With Deductions	*5498s.f.*	



EXERCISE 4 - HOUSING PROPOSAL

Assigned - June 15
Due - July 23

Develop your analysis from Exercise 3 into a comprehensive architectural proposal. These proposals must take into account the following:

1. Reuse *- You must re-use at least 50% of the existing structures on the site*

2. Planning **-** Your proposals for unit layouts, mixes, vertical circulation, and public space must be novel, experimental, and reflective of how people inhabit New York City in 2020.

3. Assembly **-** This project must embrace the concept Design for Disassembly. Delaminate the building into layers based on their life-spans. The structures, facades, circulation, partitioning, and furnishing must be designed to accommodate changing tastes, needs, and living habits over the next 100 years. Time is a critical component.

4. Context - You must develop architectures that not only give respect to the site's historical context, but also present themselves as contemporary solutions to structure and enclosure.

FINAL DELIVERABLES

. Site Plan
. Overall isometric / axonometric
. Plans of all floors
. (2) Sections
. Concept diagram
. Assembly / disassembly diagram
. Exterior perspective
. Interior perspective
. Facade detail showing interface of old / new architectures

Drawings may be combined / hybridized to convey more information

COURSE EXPECTATIONS

. That students will develop a high level of independent thought and rigor and a willingness to go beyond both basic project requirements and their own perceived limits and abilities.
. That students will successfully complete all project requirements. No make-up or postponed project submissions will be accepted except in the case of medical emergencies or other extraordinary circumstances. Excused absences and project delays must be officially cleared by professor in advance in order to be considered valid.

METHODS OF ASSESSMENT

. Attendance and participation in class discussions: 20%
. Project development in response to semester schedule: 50%
. Project presentation, completion and resolution: 30%

Note: The Research component of the studio will be weighed more heavily in assessment of graduate student work and class performance.

KEY AREAS OF GRADING ASSESSMENT

. **Studio performance & work habits:** Ability to respond to studio criticism & discourse in a consistent & clear manner throughout the course of the semester as demonstrated in the evolution and development of design work.
. **Clarity of representation & mastery of media:** Ability to utilize both digital and manual drawing and model-making techniques to precisely and creatively represent architectural ideas.
. **Pre-design:** Ability to prepare a comprehensive program for an architectural project that includes such tasks as: 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.
. **Research:** Understanding of the theoretical and applied research methodologies and practices used during the design \ process.
. **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.
. **Attendance:** Consistent level of preparation and on-time presence for each studio class and scheduled evening lectures.
. **Portfolio:** Completion of portfolio as directed by coordinator and attendance at all scheduled portfolio related events.

GRADING CRITERIA

A (+/-) Work meets all requirements and exceeds them. Presentations are virtually flawless, complete, and finely detailed. Work exhibits professional, “museum quality” level of craft. Student has developed an individual design process that shows a high level of independent thought and rigor. Work shows evidence of intense struggle to go beyond expectations, and beyond the student’s own perceived limits of their abilities.

B (+/-) Work meets all requirements. Presentations are complete and finely detailed. Work exhibits professional level of craft. Student has developed an individual design process that shows a high level of independent thought and rigor.

C (+/-) Work meets minimum requirements. While presentations may be complete, student has struggled to develop an individual design process and/or is lacking in craft or design resolution.

D Work is below minimum requirements. Presentations are incomplete, student has struggled to develop an individual design process and/or is lacking in craft or design resolution.

F Work is well below minimum requirements. Student does not develop adequate design process, and/or does not finish work on time.

INC Grades of "incomplete" are not given under any circumstances unless there is evidence of a medical or personal emergency. In such cases, instructor and student develop a contract to complete work by a specified date, as per CCNY policy. Classes / work missed due to illness must be explained with a physician's note.

Notes:

. C is the lowest passing grade for M.Arch I and M.S. Arch students. D is the lowest passing grade for B.Arch students. No C- or D grades may be given to graduate students.
. Working in teams does not guarantee the same grade for each team member; grades are based on a range of criteria for each student.
. For more information on grading guidelines and other CCNY policies and procedures, consult the current CCNY academic bulletins: https://www.ccny.cuny.edu/registrar/bulletins

OFFICE HOURS

Office hours are set by appointment. If a student needs to speak in private with a studio critic they must email in advance to request a meeting time. Students may seek office hour appointments to discuss any matters of concern including personal, private matters and general inquiries about course related work, grading, assessment and content.

PROBATION & DISMISSAL

For program specific information related to grades, academic standing, probation and dismissal, please see your program academic advisors:

B.Arch: Michael Miller mmiller@ccny.cuny.edu
Amy Daniel adaniel@ccny.cuny.edu
M.Arch: Hannah Borgeson hborgeson@ccny.cuny.edu

STUDIO CULTURE

Working collaboratively and respectfully on studio assignments, often with others, is mandatory. Studio culture is an important part of an architectural education. Please see the Spitzer School of Architecture Studio Culture Policy, which can be accessed on the SSA website here: https://ssa.ccny.cuny.edu/about/policies/.

ABSENCE & LATENESS

Arriving more than ten minutes late to class will constitute an absence. Two unexcused absences will result in a whole letter grade deduction from a final grade; more than four will result in a failing grade. It is expected that all students will participate in all scheduled working, midterm and final reviews and contribute constructively to the discussion.

ABSENCES DUE TO RELIGIOUS OBSERVANCES

Students who will miss any class sessions, exams, presentations, trips, or the like due to a religious observance should notify the instructor at the beginning of the semester so that appropriate adjustments for observance needs can be implemented. This could include an opportunity to make up any examination, study, or work requirement that is missed because of an absence due to a religious observance on any particular day or days.

READINGS & JOURNALS

Students are expected to keep a journal or sketchbook throughout the duration of studio to document their thought process & take notes of any texts, books, terms or references that are mentioned by either the studio critic or fellow classmates and to selectively follow up on these and any other assigned readings before the next class.

ACADEMIC INTEGRITY

As a student you are expected to conduct yourself in a manner that reflects the ethical ideas of the profession of architecture. Any act of academic dishonesty not only raises questions about an individual's fitness to practice architecture, but also demeans the academic environment in which it occurred. Giving or receiving aid in examinations, and plagiarism are a

violation of an assumed trust between the school and the student.

Plagiarism, i.e. the presentation as one's own work of words, drawings, ideas and opinions of someone else, is a serious instance of academic dishonesty in the context as cheating on examinations. The submission of any piece of work (written, drawn, built, or photocopied) is assumed by the school to guarantee that the thoughts and expressions in it are literally the student's own, executed by the student. All assignments must be the student's original work. Any copying, even short excerpts, from another book, article, or Internet source, published or unpublished, without proper attribution will result in automatic failure of the entire course.

The CCNY Academic Integrity Policy: https://www.ccny.cuny.edu/about/integrity

For citations, the Chicago Manual of Style is recommended: http://www.chicagomanualofstyle.org/tools_citationguide.html

ACCESSABILITY CENTER (STUDENT DISABILITY SERVICES)

The AccessAbility center (AAC) facilitates equal access and coordinates reasonable accommodations, academic adjustments, and support services for City College students with disabilities while preserving the integrity of academic standards. Students who have self-identified with AAC to receive accommodations should inform the instructor at the beginning of the semester. (North Academic Center 1/218; 212-650-5913 or 212-650-6910 for TTY/TTD). https://www.ccny.cuny.edu/accessability

LIBRARY

The school's library is a shared resource that is necessary supplement to all research and design work. Please direct questions to the library staff or the Architecture Librarian Nilda Sanchez: nsanchez@ccny.cuny.edu

NAAB (NATIONAL ARCHITECTURAL ACCREDITING BOARD)

The National Architectural Accrediting Board (NAAB) is the sole agency authorized to accredit US professional degree programs in architecture. Since most state registration boards in the United States require any applicant for licensure to have graduated from a NAAB-accredited program, obtaining such a degree is an essential aspect of preparing for the professional practice of architecture. While graduation from a NAAB-accredited program does not assure registration, the accrediting process is intended to verify that each accredited program substantially meets those standards that, as a whole, comprise an appropriate education for an architect.

More specifically, the NAAB requires an accredited program to produce graduates who: are competent in a range of intellectual, spatial, technical, and interpersonal skills; understand the historical, socio-cultural, and environmental context of architecture; are able to solve architectural design problems, including the integration of technical systems and health and safety requirements; and comprehend architects' roles and responsibilities in society.

The following student performance criteria from the 2014 NAAB Conditions are addressed in this course:

Realm B: Building Practices, Technical Skills, And Knowledge. Graduates from NAAB-accredited programs must be able to comprehend the technical aspects of design, systems, and materials and be able to apply that comprehension to architectural solutions. In addition, the impact of such decisions on the environment must be well considered.

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.

Realm C: Integrated Architectural Solutions. Graduates from NAAB-accredited programs must be able to demonstrate that they have the ability to synthesize a wide range of variables into an integrated design solution.

C.1 Research: understanding of the theoretical and applied research methodologies and practices used during the design process.

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.

Students should consult the NAAB website www.naab.org for additional information regarding student performance criteria and all other conditions for accreditation.

CONTACT INFORMATION

John Patrick Cunningham, RA
email: jcunningham1@ccny.cuny.edu
phone: 630-217-4498
ig: @the.midwesterner