Spitzer The Bernard & Anne Spitzer School of Architecture

Type of Course:	**Graduate Studio + Research Workshop/Design Seminar**
M.Arch 2nd yr:	ARCH 74100 Architecture Studio IV (6 cr) + ARCH 73501 Research Workshop (3 cr)
M.Arch 3rd yr:	ARCH 85200 Advanced Studio (6 cr) + ARCH 85200 Research Workshop (3 cr)
M.S. Arch:	ARCH 92102 Advanced Studio (6 cr) + ARCH 92202 Design Seminar (3 cr)
Class Meetings:	**Workshop M 9:30-12:20; Studio M/TH 2:00-5:20pm**
Instructor:	**Sasha Topolnytska + Elsa Ponce**
Office Hours:	**By Appointment: Topolnytska (Monday 1:00-2:00). Ponce (Monday 12:30-1:30)**
Location:	**SSA 221**
Semester/Year	**Spring 2025**

GENERAL DESCRIPTION

STUDIO: This advanced studio explores an architectural project through extended design research and in-depth building design propositions. Engaging with a variety of contemporary architectural design topics, students analyze and synthesize human, socio-cultural, contextual, technical, and regulatory forces. Project work includes quantitative investigation of environmental impacts and articulation of mitigation strategies. Independent research methodologies are supported, and student work is expected to achieve the quality of a well-developed architectural design thesis and design proposition.

RESEARCH WORKSHOP: This required seminar course focuses on special topics of study that support and broaden the design studio curriculum. Students co-enroll in this course with their architectural design studio.

City Kids Educational Center by BAAO

Harlem Village

Prioritizing early childhood learning and inclusive design, students in the Harlem Village studio and research workshop will design an early educational center in West Harlem, NY. Responding to the current childcare issues and learning from design for children, students will envision a new environment that supports young children, their caregivers, and the surrounding community. Through research and documentation on the critical role of the early childhood environment, students will design an early childcare center that not only meets accessible design standards but advances innovative approaches to physical and sensory accessibility. Responding to social and environmental sustainability through research, design exercises, and one-on-one conversations with structural engineering professionals, students will prioritize mass-timber construction with a selection of renewable, low-carbon construction materials in their designs.

Background

The early years of a child's life are crucial for healthy brain development, setting the stage for future educational success, economic productivity, and lifelong well-being of children and their parents. Providing equitable access to high-quality, inclusive, and culturally responsive childcare and early learning opportunities is transformative for children, guiding their life paths and giving them a solid foundation to grow and thrive. High-quality early childcare education is also crucial for the children's parents. Research has shown that high-quality childcare and early learning programs produce significant returns on investment for both children and parents. (1) For parents to be able to work or engage in any educational activities that can enhance their financial stability, they must be confident that their children are in safe and nurturing environments. Consequently, the design of early educational childcare spaces has significant and interconnected effects on children, their families, and early educators.

However, despite the advantages, most families in New York do not have access to high-quality early educational opportunities. Before COVID-19, 7 out of 10 children under five lived in neighborhoods with insufficient childcare options. Although some temporary efforts and solutions have kept the NY childcare system going, many childcare centers have been forced to close. The pandemic only worsened the situation, causing even more childcare providers to close their businesses. Five years after the pandemic - the city is still unable to recover. Many families are left to scramble with the lack of federal and state funding investment in early childhood education.

And while high-quality early childcare is difficult to access for the majority of families, it is even more challenging for families of children with disabilities. Children with physical and neurological differences continue to face significant barriers in accessing early childhood programs. Often only offered the option of receiving special education services in settings separate from their peers, excludes children with disabilities together with their families from the same options as others. This results in even fewer options available for childcare, putting even more strain on parents of children with disabilities, which hurts their financial stability and prevents economic growth. Research has shown that inclusive educational settings provide many benefits for children with disabilities, including greater cognitive and language development, increased social competence, and more substantial academic and employment outcomes in the future. In the same setting, children without disabilities also benefit from developing empathy at earlier stages, which can help reduce bias. (2) Consequently, designing with inclusivity in mind can benefit everyone.

The neglect to sustain an accessible, affordable, high-quality childcare system for all families comes from decades of governmental treatment and funding of childcare as a private service rather than vital public infrastructure. The lack of investment in childcare prevents many providers from hiring qualified professional staff to care for children with physical and neurological differences. Another reason that forces childcare providers to deny access to childcare to families of children with disabilities is the inaccessibility of many existing facilities. Many existing childcare centers are not designed to be accessible for children with physical and neurological disabilities.

1. “Return on Investment in Birth to Three Early Childhood Development Programs,” Heckman Equation, September 6, 2018, https://heckmanequation.org/www/assets/2018/09/F_ROI-Webinar-Deck_birth-to-three_091818.pdf.
2. “Policy Statement On Inclusion Of Children With Disabilities In Early Childhood Programs,” U.S. Department of Health And Human Services and U.S. Department Of Education, September 14, 2015, https://www2.ed.gov/policy/speced/guid/earlylearning/joint-statement-full-text.pdf.

Infant School by Armand Nouvet

SPECIFIC LEARNING GOALS & OUTLINES OF ASSIGNMENTS (STUDIO)

In the studio, students will work through a series of interconnected exercises. Students will start working in teams/pairs at the start of the semester, and for the final Project Development, students will work in pairs on a new construction in West Harlem, NY.
Note: Distributed assignments and reading materials during the semester will supersede the below.

P.1 Case Study

As an introduction to designing inclusive and nurturing spaces for children, students will choose two (2) Childcare Precedents. Students must examine the precedents on how their spatial organizations manifest different ideas about childhood, learning, inclusion, and play. Students should also be able to elaborate on the selected project's architectural conceptual ideas and program arrangement and how it organizes the project's form & concept as well as interior & exterior spaces.

Students will explore two (2) material precedents as possibilities for designing spaces for children, emphasizing heightened sensory experiences and sustainable, non-toxic materials. The material precedents introduce students to projects that use repurposed or renewable materials to create highly tactile and immersive environments.

Deliverables for Thursday, 1/30 pin-up:

- Two (2) Childcare Precedents. For each, find images: 1 plan, 1 elevation or section, 2 views. Print on 8.5x11 (can be multiple).
- Two (2) Material precedents, printed on 8.5x11.
- Two (2) Speculative Collages. Combine one of your Childcare Precedents with Material Precedents to make a speculative collage (can be handmade or digital or combination, or can be 3D or combine 3D elements) approximately 8.5"x11" in size.
  Note: During the pin-up, students should be able to elaborate on why and how they chose their case and material studies. Students will be presenting their speculative images to the class.

Deliverables for Monday 2/3 pin-up:

- Two (2) Wall Section Models. Scale: 1/2" or 1".

Week 01 - 02
Individual

P. 2 Concept Development

P. 2A Concept Development: Human Scale

Before students move to design on building & site scales, students must gain an understanding of the human scale and the relationship of the body in space. While the primary program for the project is an early education childcare center with children and their caregivers being primary users, the other part of the program is a recreational community program, meaning both children and adults (of different ages) will have access to the newly designed spaces. Understanding different bodily needs and what makes space accessible, inclusive, and joyful will provide the students with initial concept ideas to guide them through the semester to design accessible and inclusive projects.

Deliverables:

- One (01) concept statement, approximately 150 words.
- One (01) Final Physical Scaled Model (Scale: ¼" or ½"). With entourage.
- Multiple Massing Models
- One (01) Diagram: showing how human scale can occupy the play structure in various ways
- One (01) Collage: showing use and materiality

Week 02 - 03
Individual

P. 2B Concept Development: Neighborhood & Architectural Scale

At the neighborhood scale, considering the site's location within Manhattanville, the proposed Childcare Center and the recreational program requirements should demonstrate a proposed connection to Sheltered Arms Playground and the surrounding residential housings. Students must address the absence of accessible and meaningful pedestrian connections at W128th Street and Convent Ave crossing due to topographical elevation street change. Using universal design principles, students must redesign the existing stair and sloped grass and stone area at the dead-end of W 128th Street. Students should consider Convent Ave Road vehicular circulation to accommodate parents' drop-off and pick-up areas.
At the architectural scale, the same factors must be integrated into a clearly defined design. Acknowledging Shelter Arms Playground and Manhattanville Houses a north-facing entry from W 128th Street must be visible and connected via a permanent path. The east-facing entry to the center must also be visible and fully accessible, and vehicular access should be considered for drop-off/pick-up.

Deliverables:

- One (01) Project Site Plan
- One (01) Project Site Section
- One (01) Neighborhood Diagram showing the connection to the Sheltering Arms Playground

- Perspective collages
  Note: The above are the minimum requirements. Other deliverables will be determined based on each group's project objectives during design development.

Week 03 – 04, and Week 12 - 15
In teams of two (2) people

St. Andrew's Scots School by Rosan Bosch Studio

P.3 Project Development

To demonstrate an understanding of site analysis, universal design, program, and concept development, students will start by developing three (3) massing study options for the proposed building. A straightforward comparison of the massing options must be accessed through the pros and cons to weigh the project's proposals in connection with the surrounding neighborhood context. Students must understand the site's potential and concept's definitions in functional and aesthetic terms. After desc crits and in-class pin-ups, students will choose one concept to proceed with developing for the rest of the semester.

Deliverables:

- One (01) concept statement, approximately 150 words
- One (01) concept diagram in any media
- One (01) Program Diagram, all levels
- One (01) Floor Plan for all levels
- Two (02) Elevations
- Two (02) Sections
- One (01) Overall project axonometric (not to scale)
- Perspectives collages
- One (01) Site Model (Scale TBD)
- One (01) Final Design Model (Scale TBD)
- Multiple Process Models
- Final Portfolio (TBD)
  Note: The above are the minimum requirements. Other deliverables will be determined based on each group's project objectives during design development.

Week 05 - 15
In teams of two (2) people - a final group for the rest of the semester

P.4 Building Integration

Structure

Students will use mass timber construction as their primary structural system to design a sustainable childcare center. Through research and analysis, students will define the type of mass timber construction (glulam, CLT, etc.) that suits their developed design and programmatic needs, as well as most used and available types in the surrounding area. Considering the programmatic requirements of an interior swimming pool as part of a community recreational program, students will also propose a suitable structural solution to accommodate larger spans and heights.

Deliverables:

- One (01) Structural Plan for all levels
- Two (02) Wall-section details. Note: The wall-sectional detail should span from the foundation to the roof and demonstrate coordination of the structural system and façade.

Week 08 - 10

Life-Safety Systems

Beyond student's relation to building circulation and programming, broader building systems must be calculated to allow code-compliant egress, ADA standards, and fire-suppression systems. Students may refer to the 2024 International Building Code (IBC) as needed.

Deliverables:

- One (01) Floor Plan for all levels, showing the location of stairways and exits.
- One (01) Floor plan for all levels: ADA accommodations.
- One (01) Floor Plan for all levels, showing occupancy loads for all spaces.
  *Note: Two [02] means of egress for all program spaces unless travel distance or occupancy load allows a single path. Use of fire-resistant materials where high-risk enclosures are present. ADA compliance throughout, including building no less than sixty percent of building entries. Compliance extended to significant exterior circulation and programming. **

Week 08 – 10

Façade

Negotiating environmental conditions, sustainable materials, and programmatic and conceptual aspects, students should design a building façade.

Deliverables:

- One (01) cut-away or exploded axonometric (not to scale)
- Two (02) Wall-section details. Note: wall-sectional detail should span from foundation to roof and demonstrate structural system and façade coordination.

Week 08 – 10

P. 5 Building Performance

Simulating & Responding to Building Performance

Using Climate Studio, co-presented in Construction Tech III/Environment Systems, students should assess the performance of your building, assigning a time range appropriate for a public hour of operation. While consideration should be paid to all simulation tools, daylight analysis must be generated for all program levels. The daylight analysis should not only be used at the end of the semester but continuously utilized in the design process in the early parts of the semester to help a better project development through revision.
Illuminance, daylight factor, and glare simulation results should be analyzed and responded to first.

Deliverables:

- One [01] Climate Studio daylight simulation, all levels.
  Note: The above are the minimum requirements. Other deliverables will be determined based on each group's project objectives during project development.

Week 10 - 11 and Week 13 - 14

Charles F. Murphy Early Childhood Development Center by Dattner Architects

SPECIFIC LEARNING GOALS & OUTLINES OF ASSIGNMENTS (WORKSHOP)

Investigate Early Childhood Environments: Research and document the importance of early childhood environments as a critical societal need. Emphasize the role of design and architecture in creating inclusive, supportive spaces for young children and their caregivers. This includes addressing the needs of diverse users—children, parents, and staff—while incorporating considerations for physical and sensory accessibility.

Explore and Develop Innovations in Accessibility: Investigate advanced research on designing environments that support sensory accessibility and neurodiversity, going beyond physical disabilities. Evaluate these findings and develop concepts that foster new relationships between disabled individuals and space, challenging traditional assumptions of accessibility.

Apply Regulatory Frameworks: Research and integrate building codes, childcare design guidelines, life safety requirements, and accessibility standards, accounting for the unique characteristics of the site and the intended users.

How to Design with Mass Timber: Investigate the tectonic and aesthetic possibilities of mass timber, a renewable and low carbon material, examining its use in structural elements and interior design, while exploring its sensory qualities, sustainability, and potential health benefits.

Note: Distributed assignments and reading materials in class during the semester, will supersede the below.

S1. Site Analysis

Students will work in teams of up to four (4) to research and analyze the project's context at the neighborhood and site scales. This two-part analysis will thoughtfully engage with themes of accessibility, reflecting the studio's objectives. Through mappings and diagrams, teams will investigate and synthetize the site's unique physical and sensory characteristics.

Part 1. Neighborhood and Site scale
Geographical, Environmental, Sociodemographic, and Cultural characteristics.

Part 2. Site scale
Physical and Sensory Accessibility, as well as any barriers to access.

Deliverables:

- Synthesis slides of Part 1 + Part 2 in PDF format (11x17 inches)
- In-class Presentation

S2. Building Massing

Working in teams, students will analyze zoning texts and interpret Floor Area Ratio (FAR) calculations, applying their findings to develop a conceptual building massing for the site. They will gather relevant information from the ZoLa (Zoning and Land Use) NYC map and conduct research into the zoning regulations, including use, bulk regulations, maximum FAR, lot coverage, height restrictions, and setbacks. Students will then calculate the maximum FAR and use this data to create building massing sketches in axonometric, plan, and section views. The final deliverables will include a brief text summarizing the applicable zoning regulations and annotated diagrams of the building massing, showing key dimensions and zoning features such as setbacks and height limits.

Deliverables:

- One (1) Site Plan
- Two (2) Sections
- One (1) Axonometric

S3. Accessibility and Environment

In response to the readings, case studies, and the studio brief, students will develop conceptual ideas for designing environments that prioritize accessibility – physical and sensory. These ideas should be represented visually in simple forms, such as parti diagrams, and should aim to explore new dimensions of accessibility. The focus will be on moving beyond the conventional view of access for disabled bodies as mere legal compliance, and instead reimagining it as a framework for inclusivity and hospitality.

Students will complete this assignment individually and present their work for group discussion with the rest of the class.

Deliverables:

- Four (4) parti diagrams/concept sketches formatted in 4.25 in x 5.5 in paper or cards

S.4 Material and Structure

Students will work in teams to research mass timber as a renewable, low-carbon construction material through readings and case studies. Research areas beyond its structural use include: mass timber contributions to health, sensory comfort, and versatility in design.

Deliverables Part 1 (Due Week 6):

- Three (3) precedents of innovative mass timber applications, detailing how the material was used and its impact on the project, formatted as slides in PDF format
- In-class model making of one mass timber assembly e.g. connection of load-bearing elements (column and beam) with panel elements (walls, floors, roofs)

Deliverables Part 2 (Due Week 8):

- In-progress drawings for consultant review: floor plans, sections, wall section.

Deliverables Part 3 (Due Week 13):

- 90% Design Development drawings for consultant review: floor plans, sections, wall section.

S.5 Circulation and Safety

Working in teams, students will research the principles of code compliance related to egress and fire suppression systems based on the 2024 International Building Code (IBC), and will apply them to their project. Students will research minimum egress widths, maximum travel distance to exists, number and location of exists, stairwell design requirements, and fire suppression systems required for their project.

Deliverables:

- One (1) axonometric drawing with overlays showing egress paths, exits accesses, exits, and exits discharges
- Brief narrative (1 pages) summarizing the Fire-Protection Systems required for the project by code and how these ensure occupant safety in an emergency

S6. Envelope

Students will work in teams to conduct detailed research and analysis of a single building, focusing on its envelope assembly, envelope interior detailing, and any external envelope attachments. The selected building should have architectural significance and complexity and be located in a climatic zone similar to that of the course's site of study, though it may be situated anywhere in the world.

Deliverables:

- Synthesis slides. Provide building's information (name, architect, location) and key drawings including plan, section, elevation, and cross section. Provide call out overlays analyzing and reflecting on the envelope's environmental and economic resilience, environmental controls, materials and form, solar gain, insulation, ventilation, durability, maintenance.
- In-class presentation

S.7 Environmental Control Systems

Working in teams, students will research and analyze one well-known sustainable building, identifying the Environmental Control Systems (passive or active) used and how they contribute to the building's performance.

Deliverables:

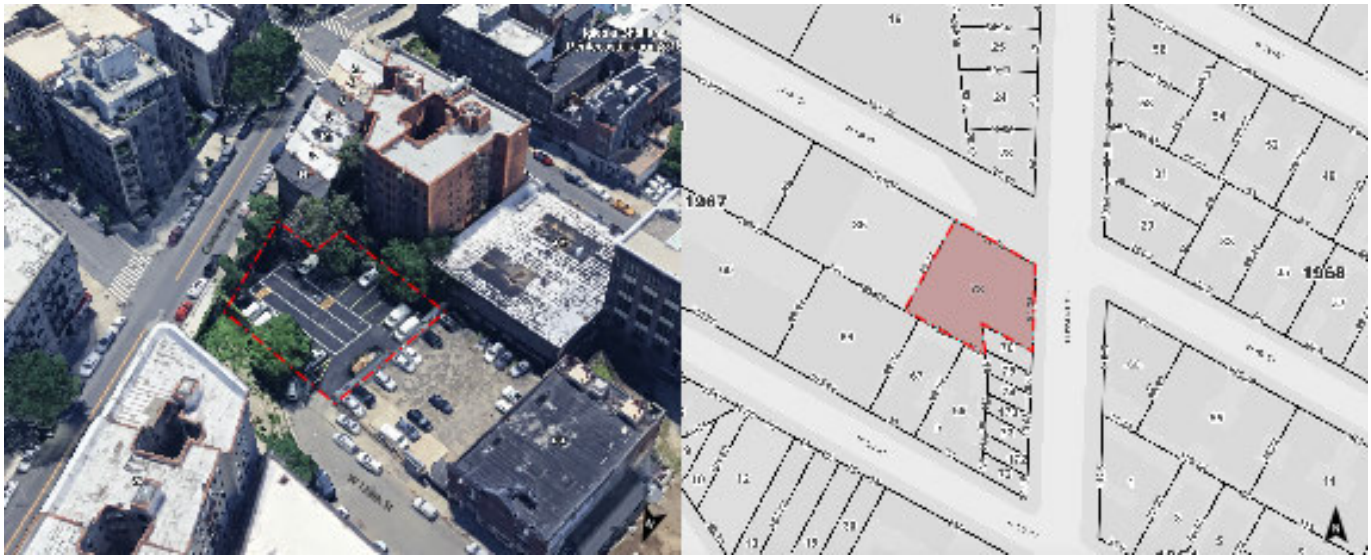
- Synthesis slides. Provide building's information (name, architect, location) and key drawings including plan, section, elevation, cross section, and details. Provide call out overlays analyzing and reflecting on

the ECS performance such as ventilation, heating, cooling, (HVAC), lighting, water management, indoor air quality, acoustics, etc.
- In-class presentation

PROJECT SITE

A single lot, 16 Convent Avenue, is located in the heart of Manhattanville, NY (also known as West Harlem). The Manhattanville Houses and Ulysses S. Grant Houses, vast public housing projects with distressing history, are just a 5-minute walk from the site. The Sheltering Arms Playground, which has a swimming pool that can be used during summer months and playgrounds that can be accessed year-round, is just one block to the west of the site. Access to the site is facilitated by a long stair extending from Convent Avenue or through a direct pedestrian route from Amsterdam Avenue and W 128th Street.

Site 6: 16 CONVENT AVENUE, 10027
Manhattan (Borough 1) | Block 1967 | Lot 78



PROJECT PROGRAM

The primary program of the new Harlem Village building will be an Early Childhood Education Center that will provide full-time childcare for preschool children and after-school for school-aged children. Together with all the required interior space programs, such as classrooms, bathrooms, common & multi-use spaces, etc., nestled within the childcare center, the program of a new building must also accommodate a community/recreational program. This community space will include a year-round indoor swimming pool with changing spaces and the sensory gym to be accessible to local families.

Note: Below is a preliminary Program List. A more detailed Program List with all the required square footage will be provided during the semester.

Preschool
Preschool Classrooms: Each classroom should have 1 cubby per child and at least 30 square feet per child
- 2 classrooms for 12 two-year olds and 3 teachers each.
- 2 classrooms for 15 three-year-old students and 2 teachers each.
- 2 classrooms with 18 four and five-year-old students and 2 teachers each.

Preschool Bathrooms: 1 child's toilet, 1 child's sink for every 15 children. Bathrooms should be in classrooms or shared between classrooms. Children should not need to go to the hallway to access the bathroom.

School-Aged Program
After School Spaces can have other purposes during the school day but cannot be used for preschoolers
Classrooms should have 1 cubby per child and at least 35 square feet per child
Classrooms/Multi Use Spaces

- 1 classroom/multi use space for 15 kindergarteners and 2 teachers
- 1 classroom/multi use space for 15 1st-3rd graders and 2 teachers
- 1 library/multi-use space for 8 students in 3rd-5th grade, and 1 teacher

School-Aged Bathrooms: 1 school-aged bathroom and 1 school-aged sink (cannot be shared with preschoolers or staff) for every 20 children

Shared Program Spaces

- Cooking space for children
- Indoor playspace
- Art space

Staff

- Office space for 6 to 8 administrative staff, including 2 private offices.
- 2 small meeting rooms for 2 or 3 people.
- ADA accessible adult bathrooms
- Commercial kitchen with easy access for deliveries.
- A break room for staff.
- Storage Spaces for custodial supplies, maintenance tools and products, school supplies, and office supplies.

Community/Recreational Spaces

- Large community space
- An indoor swimming pool
- Changing rooms
- A sensory gym dedicated to sensory exploration and development
- Storage Spaces

Outdoor Spaces

- A space dedicated to gross motor activities like running, climbing, and sliding, with a play structure (roughly 1,500 square feet)
- A space dedicated to sensory exploration and development, with opportunities to explore mud, water, rocks, sand, and more (roughly 2,000 square feet)
- A sunny area to grow fruit and vegetables. Ideally, the garden will be at least 800 square feet and should include a storage bin for gardening supplies and equipment and a composter.

Other Program Considerations

- The building will have to have at least two main entrances from the adjacent streets. One to the childcare center and the other to the community/recreational program.
- Childcare and Community/Recreational spaces each have their own dedicated active lobby
- Additional space for community events would be an asset – perhaps adjacent landscape sloped area at the dead-end of W 128th Street can be redesigned to serve the purpose.
- Outdoor or indoor space for stroller parking is to be provided.
- Students should understand FDC standards the requirements for childcare design.

Design and Construction Consideration

- The building design should take into consideration physical and sensory accessibility.
- The construction type for the project should incorporate mass timber, and sustainable and renewable materials.

- Students should use LEED certification in choosing durable, long-lasting, and sustainable building materials in the design of their projects.

READINGS + BIBLIOGRAPHY

For specific articles and readings, refer to the assignments.
The professors will provide all readings via PDFs or links.

Contemporary Debates on Childcare

Kashen, J., Toribio, L., Vadehra, E., Powell, C., Hackett, J., Potter, H., Park, N., Bartholomew. A. (2021) *Building a High-Quality Child Care and Early Learning Infrastructure for New York City.* https://tcf.org/content/report/building-high-quality-child-care-early-learning-infrastructure-new-york-city/

Novoa, Cristina. (2020) *The Child Care Crisis Disproportionately Affects Children With Disabilities.* https://www.americanprogress.org/article/child-care-crisis-disproportionately-affects-children-disabilities/

Childcare Deserts https://childcaredeserts.org/

Designing for Children

Lange, Alexandra. *The Design of Childhood: How Material World Shapes Independent Kids.*

Gutman, Marta. *Educating Harlem.*

Accessibility

Aimi Hamraie - *Critical Access Studies* (00:00 - 57:30)
https://www.youtube.com/watch?v=uCL-EtS2F5k

Allen, Matthew. Designing for Disability Justice.
https://www.gsd.harvard.edu/2021/02/designing-for-disability-justice-on-the-need-to-take-a-variety-of-human-bodies-into-account/?mc_cid=4b5cd0c3d8&mc_eid=75e39278e3

Casey, T. (2010). *Inclusive play: Practical strategies for children from birth to eight* (2nd ed.). SAGE Publications.

Preiser, W. F. E., & Smith, K. H. (Eds.). (2010). *Universal design handbook* (2nd ed.). McGraw-Hill.

Gissen, D. *The Architecture of Disability: Buildings, Cities, and Landscapes Beyond Access.* Minneapolis : University of Minnesota Press, 2023

Mostafa, Magda. An Architecture for Autism: Concepts of Design Intervention for the Autistic User

Jennifer Carpenter, Evander Smith, Rachel Updegrove, Cait Rosica - *Sensory Space: Design for Neurodiversity https://www.youtube.com/watch?v=2vUDLJH9g8I*

US Access Board. *Accessibility Guidelines for Play Areas.* https://www.access-board.gov/ada/guides/chapter-10-play-areas/

U.S. Department of Justice. *ADA Standards for Accessible Design*. Washington, DC: U.S. Department of Justice, 2010. Accessed at https://www.ada.gov.

International Code Council Guidelines. *ICC/ANSI A117.1-2003 Accessible and Usable Buildings and Facilities*

Structure and Building Systems

McLeod, V. (2015). *Detail in contemporary timber architecture.* Laurence King Publishing.

Mithun. *Mass Timber Schools: Building for Wellness*
chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://mithun.com/wp-content/uploads/2021/12/MassTimberSchools_Report.pdf

Herzog, T., Krippner, R., & Lang, W. (2004). *Building skin: Concepts and applications.* Birkhäuser.
7group, & Reed, B. (2009). *The integrative design guide to green building: Redefining the practice of sustainability.* Wiley.

Grondzik, Walter T., and Alison G. Kwok. *Mechanical and Electrical Equipment for Buildings*. 13th ed., Wiley, 2019.

Codes and Standards

Ching, Francis D. K. *Building Construction Illustrated. 6th ed.* Hoboken, NJ: Wiley, 2019.

Ching, Francis D. K., and Steven R. Winkel. *International Building Code Illustrated: A Guide to Understanding the 2021 International Building Code.* Hoboken, NJ: Wiley, 2021.

Wiley, J., & The American Institute of Architects. (2016). *Architectural graphic standards* (12th ed.). John Wiley & Sons.

WEEKLY SCHEDULE

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

Week	Day	Seminar 9:30AM - 12:20 PM (Elsa)	Studio 2:00-5:20 PM (Sasha)
W 1	Mon 1/27	**Lottery** **Assigned: S.1** Two-part Site Analysis in teams of 3-4. **Readings assigned:** Hamraie, A. "Critical Access Studies" (00:00 - 57:30)	Syllabus, Intro, etc. Hour SSA - Draft Community Agreement **Assignment: P. 1 Case Study** Readings: Kashen, J., Toribio, L., Vadehra, E., Powell, C., Hackett, J., Potter, H., Park, N., Bartholomew. A. *Building a High-Quality Child Care and Early Learning Infrastructure for New York City.* Allen, Matthew. *Designing for Disability Justice.*
	Thu 1/30		**Convocation 2 - 3 pm** Pin-Up: P.1 Part 1
W 2	Mon 2/3	**Due: S.1** Site Analysis Part 1 Geographical, Environmental, Sociodemographic, and Cultural **Readings assigned:** Case, T. "Inclusive play: Practical strategies for children from birth to eight" (Chapters 1&2) Preiser, W. F. E., & Smith, K. H. "Universal Design Handbook" (Chapters 1 to 4)	**Pin-Up: P.1 Part 2** **P.2A Concept Development: Human Scale**
	Thu 2/6		Studio *Sciame Lecture: Sara Zewde "The Aesthetics of Being"*
W 3	Mon 2/10	**Due: S.1** Site Analysis Part 2 Physical and Sensory Accessibility **Assigned: S.2** Accessibility and Environment. Individual. **Assigned: S.3** Building Massing. Teams. **Readings Assigned:** Mostafa, M. " An Architecture for Autism: Concepts of Design Intervention for the Autistic User" Gissen, D. "The Architecture of Disability: Building Cities and Landscapes Beyond Access" (Chapters 4,5,6)	**Due & Pin-Up: P.2A** **P.2B Concept Development & Site Planning: Neighborhood & Architectural Scale** *Sciame Lecture: Joel Sanders "Building Belonging: Equity, Health and Wellbeing in Public Space"*
	Thu 2/13		Studio
W 4	Mon 2/17	No Class	No Class
	Tue 2/18	Student-led discussion on Readings Assigned on week 3 **Due: S.3** Building Massing. Teams. Submit via email	Studio

	Thu 2/20		**Due & Pin-Up: P. 2B Concept Development & Site Planning: Neighborhood & Architectural Scale** **Assigned: P.3 Project Development** *Sciame Lecture: Jack Jen Gieseking "Lesbian Bars/Queer Parties: On How We Can Never Afford Them and Why We Need Them Anyway"*
W 5	Mon 2/24	**Due: S.2** Accessibility and Environment. Pin-up and group discussion. Individual **S.4 Assigned:** Material and Structure. Teams **Readings Assigned:** McLeod, V. "Detail in contemporary timber architecture." Mithun. "Mass Timber Schools: Building for Wellness"	Studio
	Thu 2/27		Studio *Sciame Lecture: Dolores Hayden "Domestic Revolutions, Then and Now"*
W 6	Mon 3/3	**Consultant presentation:** Mass Timber introduction and applications **Due: S.4** Material and Structure, Part 1. Teams **Assigned: S.5** Circulation and Safety. Teams **Readings Assigned:** International Building Code (Chapters 3, 5, 7, 9, 10, 11)	Pin-Up: P.3
	Thu 3/6	**No Class**	**No Class**
W 7	Mon 3/10	**Due: S.5** Circulation and Safety. Presentation and group discussion. Teams	Studio
	Thu 3/13		**P. 4 Building Integration** *Mumford Lecture: Aimi Hamraie "Rethinking Livability"*
W 8	Mon 3/17	**Structural consultant review** **Due S.4** Material and Structure, Part 2. Teams	Studio
	Thu 3/20		Tentative Zoom or No Class (TBC) Sasha is in New Orleans for ACSA Conference Students to continue to work on Project Development, post work posted on Miro *Sciame Lecture: Chelina Odbert "Situating Justice: The Role of Planning and Design in Shaping a More Equitable Public Realm"*

W 9	Mon 3/24	Work in Class **Assigned: S.6** Envelope. Teams **Readings Assigned:** McLeod, V. "Detail in contemporary timber architecture." Schittich, C. "Building skin: Concepts and applications." Basel: Birkhäuser.	**MID-REVIEW (TBC)** **P.3 Project Development**
	Thu 3/27		Post-Mid-Review Revisions
W 10	Mon 3/31	**No Class**	**No Class**
	Thu 4/3		**P.5 Building Performance Studio** *Sciame Lecture: Despina Stratigakos "A Collaborative (Re)turn: Feminist Architectural Historians Join Forces and Get Things Done…Again"*
W 11	Mon 4/7	**Due: S.6** Envelope. Pin up and discussion. Teams **Assigned: S.7** Environmental Control Systems	**GRAD SHARING SESSION 2 - 4pm** **Studio**
	Thu 4/10		Studio *Sciame Lecture: Screening of the film "Ada: My Mother the Architect" (2024)*
SB Week	Mon 4/14	**No Class**	**No Class**
	Thu 4/17	**No Class**	**No Class**
W 12	Mon 4/21	Technical Representation Workshop **Due: S.7** Environmental Control Systems	Production
	Thu 4/24		Production
W 13	Mon 4/28	**Structural consultant review** **Due S.4** Material and Structure, Part 3. Teams	Production, Building Analysis
	Thu 5/1		Production, Building Analysis
W 14	Mon 5/5	Technical Representation Workshop Work in class	Production, Building Analysis
	Thu 5/8		Production
W 15	Mon 5/12	Technical Representation Workshop Work in class	Production
	Tue 5/13		**FINAL REVIEW**

	Thu 5/15		Portfolios Due

FINAL STUDIO REVIEWS, May 9-15
FINAL EXAMS, May 16-22 – No studio work shall be required during final exams week.

Fri 9 May	Mon 12 May	Tue 13 May	Wed 14 May	Thu 15 May
Foundation	**Foundation**	**Grad Studios**	**Grad Studios**	**Grad Studios**
Williamson (Arch) Kuehl (Arch)	Rivera/Guzman Palacios (MLA)	Topolnytska (Arch) Salcedo (UD)	Melendez (Arch) King (MLA)	Ruppert (Arch)

Th	05.15	Student Portfolios due for: SSA/CCNY Archive, etc. as directed by instructor
M/Tu	05.19 & 05.20	Clean-up Day (all materials, projects, and any other items must be removed from studio—no exceptions)
M/Tu	05.19 & 05.20	End of Semester Assessments (faculty only) – Grad Assessment on 5.20 at 2pm
Tu		05.27 Final Grade Submission Deadline for faculty

TAKE NOTE: ALL personal effects in studios and student lockers to be entirely cleaned out for the summer by Thursday May 22nd.

GRADING/ATTENDANCE POLICIES AND STUDIO CULTURE

Learning Outcomes:

- Application of architecture research methods for testing and evaluating innovative approaches to design. (NAAB PC.5)
- Development and application of a process for shaping the built environment through design. (NAAB PC.2)
- Application of methods for integrating multiple factors into a design process, working in at least two scales. (NAAB PC.2)
- Development of the ability to make design decisions in the design of a building while integrating the following. (NAAB SC.6)
    - A building envelope system and assembly
    - A primary structural system
    - An environmental control system (passive or active, depending on project context)
    - Life safely systems
- Development of the ability to consider the outcome of building performance by at least one quantitative measure. (NAAB)
- Students in ARCH 74100 (Architecture Studio IV) and ARCH 85210 (Architecture Studio VI), alongside ARCH 73501 and ARCH 85200 (Research Workshop), will approach work through a general focus on Integration. Learning outcomes for the course are designed to frame this essential architectural concern through NAAB criteria while supporting iterative project development. While projects will be developed in groups, methods for assessment will focus on individual contributions to required deliverables and on individual understanding of the topics under consideration.

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 to be considered valid.

Community Agreement:

- As noted on the schedule, the professor will make time for an *Hour SSA* session for a supportive open discussion among students.

- Studio members will work *together* to create a community agreement for interacting together over the semester. Definition: “A consensus on what every person in our group needs from each other and commits to each other in order to feel safe, supported, open, productive and trusting… so that we can do our best work.” https://www.nationalequityproject.org/tools/developing-community-agreements
- *Hour SSA* will be repeated at the middle of the semester.

Methods of Assessment:

- Assessment will focus on the quality of progress each class, research, and narrative in the argumentation
- of each project, as well as on the final quality of design and documentation.
- Project development in response to semester schedule.
- Project presentation, level of completion and resolution.
- Attendance & Participation consistent level of preparation and on-time presence for each studio class and scheduled evening lectures.

Grading Assessment:

- Attendance: Consistent level of preparation and on-time presence for each studio class and scheduled evening lectures.
- Effort: Work demonstrates sufficient time spent and attention to detail. Student consistently tests, Iterates and revises their designs.
- Participation: Engaging in studio discussions, readings, and presentations.
- Studio performance & work habits: Ability to respond to studio discourse & feedback in a consistent & clear manner throughout 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.
- Research & innovation: Understanding of the theoretical and applied research methodologies and practices used during the design process, and test and evaluate recent innovations in the field of architecture.
- Design Development: Ability to prepare a comprehensive program for an architectural project that includes such tasks as: an assessment of 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.
- Integrated evaluations and decision-making in the design process: Ability to demonstrate the skills associated with making integrated decisions across multiple systems and variables in the completion of a design project, in different settings and scales of development, from buildings to cities. This demonstration includes problem identification, setting evaluative criteria, analyzing solutions, and predicting the effectiveness of implementation.
- Portfolio. Completion of final portfolio or collection of studio work as directed by instructor and attendance at all scheduled portfolio related events.

Studio (6 cr)

P. 1 Case Study	10%
P. 2 Concept Development	15%
P. 3 Project Development	30%
P. 4 Building Integration	20%
P. 5 Building Performance	10%
Final Portfolios Submission	5%
Participation & Attendance	10%

Research Workshop (3 cr)

S.1 Site Analysis	15%
S.2 Accessibility and Environment	10%
S.3 Building Massing	10%

S.4 Material and Structure	20%
S.5 Circulation and Safety	15%
S.6 Envelope	10%
S.7 Environmental Control Systems	10%
Participation & Attendance	10%

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 ambition and effort 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. Deadlines are missed. While presentations may be somewhat complete, student has struggled to develop an individual design process and/or is lacking in craft or design resolution.

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

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 and/or work missed due to illness must be explained with a physician's note.

Grading Scale

LETTER	RANGE
A+	EXCEPTIONAL
A	93-97
A-	90-92
B+	87-89
B	83-86
B-	80-82
C+	77-79
C	70-77
F	69 OR BELOW

Notes:
C is the lowest passing grade for M. Arch I and M.S. 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 individual 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:
Each studio/unit faculty member schedules regular office hours over the semester, as posted at the top of the syllabus. If a student needs to speak in private with a studio/unit critic, they should ask or email in advance to request a specific 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 advisor:
Graduate: Hannah Borgeson hborgeson@ccny.cuny.edu

Learning, Teaching, and School Culture Guidelines:
Working collaboratively and respectfully on studio assignments, with and alongside others, is an expectation in studio. Studio culture is an important part of an architectural education, and it extends to expectations for Faculty and the School's Administration as well. Please see the Spitzer School of Architecture Learning, Teaching, and School Culture Guidelines, 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 (2) unexcused absences** from Studio (or one from Research Workshop) will result in a **whole letter grade deduction** from a final grade; **more than four (4)** from Studio (or two from Research Workshop) will result in a f**ailing grade**. It is expected that all students will participate in all scheduled working, midterm and final reviews and contribute constructively to the discussions.

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 as serious an instance of academic dishonesty in this 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, or generated by AI tools *without proper attribution* will result in automatic failure of the entire course.

Wherever possible, AI-produced works are not to be presented as raw, unedited outputs; some layer of critical revision, editing, or iteration is expected. If such tools are used, standard requirements of citation must be met, including: which AI tool was used; what prompt was used to generate the results; and date of access/creation. Since AI tools cannot take responsibility for submitted work or assert conflicts of interest, they cannot meet the requirements for authorship. Even when transparent in disclosing the use of AI tools, authors who use these tools remain responsible for the content of the work produced and are liable for any breach of ethics.

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). For further information, go to http://www.ccny.cuny.edu/accessability/ or email disabilityservices@ccny.cuny.edu

Health And Wellness Support:
City College's Office of Health and Wellness Services offers free and confidential counseling. Contact: Health and Wellness Services, Marshak Science Building, room J-15: counseling@ccny.cuny.edu.

Gender Based Violence Resources
City College has resources to support you if you have experienced sexual violence, intimate partner/domestic violence, gender-based discrimination, harassment or stalking. For confidential support, you can contact the Student Psychological Counselor: Confidential Advocate at (212) 650-8905 or the Gender Resources Program at (212) 650-8222. If you would like to report sexual misconduct, you can contact the Chief Diversity Officer and Title IX Coordinator, Sheryl Konigsberg, at 212-650-6310 or skonigsberg@ccny.cuny.edu. If there is an emergency on campus, you can call Public Safety at 212-650-777 and off campus call 911.
https://www.ccny.cuny.edu/affirmativeaction

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

NAAB CRITERIA ADDRESSED (2020 Conditions for Accreditation)

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.5 Research & Innovation—How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.

SC.6 Building Integration— How the program ensures that students develop the ability to make design decisions within architectural projects while demonstrating synthesis of user requirements, regulatory requirements, site conditions, and accessible design, and consideration of the measurable environmental impacts of their design decisions.

CONTACT INFORMATION:
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