Folding Wheelchair
Designer: Kazuo Kawasaki, 1989
Photo:http://MoMa.org
MoMa Collection 1950s-1970s 417 Body Construct
Carna Folding Wheelchair

Higher Education
Berkeley, United States
Architects: Leddy Maytum Stacy Architects
Image Source: archdaily.com Photographs:Tim Griffith

Accessible design, Charter School
OVERVIEW

Architecture design, practice, and studies are beyond functionality, and accessible design is no exception. The key focus of this studio is on both technical solutions to accessibility and accessible design that goes beyond functionality, considering aesthetics, socio-spatial dynamics, sustainability, gender, diversity, and more.

The project involves designing a Charter High School with the mission of empowering future generations. The school will feature spaces for a variety of activities, including classes, workshops, event spaces, breakout rooms and smaller group activities. It will serve not only as a place for student growth but also as a hub for family connections and a venue for national and global community events held multiple times a year. These events aim to promote the school's mission, bring together teachers to share their practices, and provide opportunities for cultural exchange, education, and potential future collaborations. Students will design an accessible charter school through research, analysis, and experimentation. They will develop a program that supports people with diverse needs and objectives. The goal is to go beyond standards and codes by integrating imaginative architectural concepts into real building designs while addressing the potentials of accessible design.

BACKGROUND AND TIMELINE

The primary reference for understanding accessibility in this studio is David Gissen's book, *The Architecture of Disability: Buildings, Cities, and Landscapes Beyond Access (university of Minnesota Press, 2022)*. This resource offers a profound exploration of accessibility, moving beyond traditional perceptions of the topic.

Another key resource for the course is the ongoing exhibition at MoMA, Body Constructs, MoMA Collection 1950s-1970s, organized by Evangelos Kotsioris, Paula Vilaplana de Miguel, and Joëlle Martin. This exhibition provides critical insights into universal design. As part of the course, we will have a visit to this exhibition to further our understanding of the accessibility in design on different scales.

In addition to these resources, we will explore how contemporary architects approach educational design. An office tour at Architecture Research Office (ARO) has been arranged, where their designers will share their experiences and insights on designing educational projects. Students are encouraged to come prepared with questions and to submit reports afterward.

Finally, students will study various charter schools and develop their designs based on assignments and their findings, relevant codes and standards. Additionally resources from the NCARB Architectural Registration Examination will be utilized to help students develop the skills needed to address the architectural challenges associated with their concepts and designs.

Week	Day	Date	Events / Pin Ups	Intro / Tours
W1	Th	08/29/2024	Convocation-Studio Lottery-Studio Meeting	Intro to Assignment 1
W2	Mon	09/02/2024		
W3	Th	09/05/2024	SSA/JEDI Climate Survey 2-3pm	Intro to Assignment 2 Site Analysis
W3	Mon	09/09/2024	Pin Up Assignment 1 Precedent	Site Visit
W4	Th	09/12/2024		
W4	Mon	09/16/2024		
W5	Th	09/19/2024		
W5	Mon	09/23/2024	Pin Up Assignment 2 Site Analysis	Intro to Assignment 3 Program and Concept Development
W6	Th	09/26/2024		
W6	Mon	09/30/2024		
W7	Th	10/03/2024	Pin Up Assignment 3-Studio Present-Program & Concept Development	Intro to Assignment 4 Schematic Design & Design Development
W7	Mon	10/07/2024		
W8	Tu	10/10/2024		
W8	Th	10/15/2024	Midterm Reviews	Office Tour to AOR Architecture Research Office
W9	Mon	10/17/2024		
W9	Th	10/21/2024	Pin up Assignment 4 Schematic Design & DD	Intro to Assignment 5 Design Development
W10	Mon	10/24/2024	Mid-Semester Assessment	
W10	Th	10/28/2024		
W11	Mon	10/31/2024		
W11	Th	11/04/2024		
W12	Mon	11/07/2024		
W12	Th	11/11/2024		
W13	Mon	11/14/2024		MoMa Tour
W13	Th	11/18/2024		
W14	Mon	11/21/2024	Pin Up Assignment 5 in progress Pre final review	
W14	Th	11/25/2024		
W15	Mon	11/28/2024		
W15	Th	12/02/2024		
W16	Mon	12/05/2024		
		12/09/2024	Final Review	

Assignment bands:
- Assignment 1 - Inspiration & Precedent Studies (individual)
- Assignment 2 - Site Analysis (Groups of 2-3)
- Assignment 3 - Program & Concept Development (Groups of 2-3)
- Assignment 4 & 5 - Schematic Design & Design Development (groups of 2-3)
- Assignment 4 & 5 - Schematic Design & Design Development (groups of 2-3)

Assignments

Individual research on the studio's topic and precedents of Accessibility, Educational projects, and Charter Schools.
1) Accessibility in Architecture & Design: A study and precedents of the current and historical aspects of accessibility, universal standards, and civil rights movements that have shaped the concept of accessibility today.
2) Contemporary Educational Project Ideas: A study and examples of architecture design and concepts of educational projects.
3) Charter Schools: Precedents of Charter Schools, challenges and potentials.

After the initial site visit, students will work in groups to develop a site analysis. The site analysis will include studies on accessibility, views, history, demographics, climate, socio-spatial context, and transportation. Key questions to consider:
1) What are the site challenges?
2) What are the site potentials?
3) How does the site relate to the context and the project?
4) What would be the best approach for site entry, including entrance, public spaces, views, etc.?

Based on the previous assignments, student groups will be defining their user groups and develop a program for the charter school. Through analytical studies, students will investigate how programs might provide supportive growth opportunities for future generations.
The program and concepts will take shape while exploring these questions:
1) What are the school objectives?
2) Who are the students and their families?
3) What kind of student activities and group sizes are required-communal spaces, breakout areas, small groups, and individual spaces, etc.?
4) What are the school staff requirements?

In these assignments, students will further develop their projects by refining selected information and drawings from previous assignments. The technical challenges of architecture and imaginative concepts will be studied in greater detail to produce real-life architectural solutions. The exercise focuses on, but not limited to, materials, systems, details, codes, and standards.

Deliverables

Writing, Diagrams, Drawings, Images

Deliverables: Site models, Diagrams, Maps, Drawings, Existing Site Plans, Images

Deliverables: Program Matrix and Diagrams, User Representations, Concept Models, Concept Drawings (Plans, Elevations, Sections), Site Plan, Perspective Views, Material options

Deliverables: Drawings (plans, sections, elevations, etc.), Diagrams, Site Plan, Interior and Exterior Rendering and/or Perspective, Sections, Narrative, Models, Building System Integrations and Materials.

PROGRAM
Lobby Reception
Playground
Classrooms: 10 Classrooms each 25 to 30 students capacity
Each classroom has one breakout room.
Nursing Room
Offices for 15 people staff including
Conference area
Event Space
Communal spaces
Pantry
Bathrooms, Janitor's closet
Library, reading room
Include all the support spaces such as, back of house, mechanical, AV room, storage, truck access delivery if needed

SITE

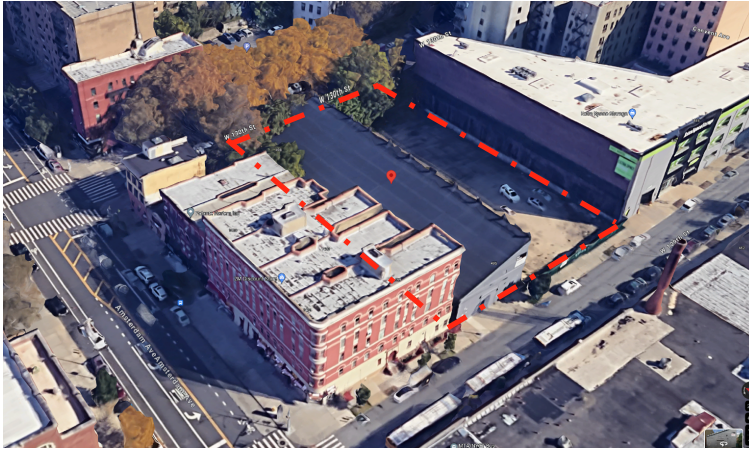Address: 497 West 129 St, 10027
The site is located at W 130th St between Amsterdam Ave and Convent Ave. It is a combination of Lot 6 and Lot 5.
Block 1969   Lot 6=19,412 sq ft
                 Lot 5= 11,643 sq ft
                 Tot Lot Area: 31,055 sq ft

READINGS & BIBLIOGRAPHY

- Ching, Francis D. K., and Steven R. Winkel. 2018. Building Codes Illustrated: A Guide to Understanding the 2018 International Building Code. N.p.: Wiley.
- Criado Perez, Caroline. 2019. Invisible Women: Data Bias in a World Designed for Men. N.p.: Harry N. Abrams.
- Eitland, Erika, Lacey Klingensmith, Piers MacNaughton, Jose C. Laurent, Jack Spengler, Ari Bernstein, and Joseph G. Allen. n.d. "FOUNDATIONS FOR STUDENT SUCCESS HOW SCHOOL BUILDINGS INFLUENCE STUDENT HEALTH, THINKING AND PERFORMANCE." Harvard T.H. Chan School of Public Health, Harvard Center for Health and the Global Environment, Healthy Buildings program, www.ForHealth.org. https://schools.forhealth.org/wp-content/uploads/2020/02/Schools_ForHealth_UpdatedJan21.pdf.
- Gissen, David. 2022. The Architecture of Disability: Buildings, Cities, and Landscapes Beyond Access. N.p.: University of Minnesota Press.
- Hille, T. 2011. Modern Schools: A Century of Design for Education. N.p.: Wiley.
- Ingram, Gregory K., ed. 2014. Education, Land, and Location. N.p.: Lincoln Institute of Land Policy.
- Kotsioris, Evangelos, Paula Vilaplana de Miguel, and Joëlle Martin. n.d. Body Constructs, Ongoing MoMa Collection 1950s-1970s. MoMA, Floor 4, 417. The David Geffen Galleries: MoMa. Exhibition.
- Kramer, Sibylle. 2010. Schools: Educational Spaces. N.p.: Braun.
- Miles, Rebecca, Adesoji Adelaja, and Mark A. Wyckoff, eds. 2011. School Siting and Healthy Communities: Why where We Invest in School Facilities Matters. N.p.: Michigan State University Press.
- Pena, William M., and Steven A. Parshall. 2012. Problem Seeking: An Architectural Programming Primer. N.p.: Wiley.
- Russ, Thomas. 2009. Site Planning and Design Handbook, Second Edition. N.p.: McGraw-Hill Education.
- "2010 ADA Standards for Accessible Design." 2010. ADA.gov. https://www.ada.gov/law-and-regs/design-standards/2010-stds/.
- "2021 International Building Code (IBC)." n.d. ICC Digital Codes. Accessed August 25, 2024. https://codes.iccsafe.org/content/IBC2021P2.

Assignment 1- Inspiration & Precedent Studies (individual)
The students will start the course by conducting individual research on the studio's topic and precedents of Accessibility, Educational projects, and Charter Schools.
- Accessibility in Architecture & Design: A study and precedents of the current and historical aspects of accessibility, universal standards, and civil rights movements that have shaped the concept of accessibility today.
- Contemporary Educational Project Ideas: A study and examples of architecture design and concepts of educational projects.
- Charter Schools: Precedents of Charter Schools, challenges and potentials.

Deliverables: Writing, Diagrams, Drawings, Images

Assignment 2- Site Analysis (Groups of 2-3)
After the initial site visit, students will work in groups to develop a site analysis. The site analysis will include studies on accessibility, views, history, demographics, climate, socio-spatial context, and transportation.
Key questions to consider:
- What are the site challenges?
- What are the site potentials?
- How does the site relate to the context and the project?
- What would be the best approach for site entry, including entrance, public spaces, views, etc.?

Deliverables: Site models, Diagrams, Maps, Drawings, Existing Site Plans, Images

Assignment 3- Program & Concept Development (Groups of 2-3)
Based on the previous assignments, student groups will be defining their user groups and develop a program for the charter school. Through analytical studies, students will investigate how programs might provide supportive growth opportunities for future generations.
The program and concepts will take shape while exploring these questions:
- What are the school objectives?
- Who are the students and their families?
- What kind of student activities and group sizes are required-communal spaces, breakout areas, small groups, and individual spaces, etc.?
- What are the school staff requirements?

Deliverables: Program Matrix and Diagrams, User Representations, Concept Models, Concept Drawings (Plans, Elevations, Sections), Site Plan, Perspective Views, Material options

Assignment 4 & 5 - Schematic Design & Design Development (groups of 2-3)
In these assignments, students will further develop their projects by refining selected information and drawings from previous assignments. The technical challenges of architecture and imaginative concepts will be studied in greater detail to produce real-life architectural solutions. The exercise focuses on, but not limited to, materials, systems, details, codes, and standards.

Deliverables: Drawings (plans, sections, elevations, etc.), Diagrams, Site Plan, Interior and Exterior Rendering and/or Perspective, Sections, Narrative, Models, Building System Integrations and Materials.

WEEKLY SCHEDULE, M/TH 2:00-5:20pm
Note: schedule below is subject to revision through the duration of the semester.

W1
Th   08.29   **Convocation @ 2:00pm, rm. 107**
Advanced Studio Lottery @ 3:00pm, Aaron Davis Hall
Studio: Introduction, Syllabus Overview, Followed by first studio meeting.
Intro: Assignment 1- Inspiration & Precedent Studies

W2
Mon   09.02   College Closed (Labor Day), no classes
Th   09.05   **Hour SSA/JEDI Climate Survey (in studio) 2-3pm**
Assignment 1 Review
Sciame Lecture: Maria Carrizosa

W3
Mon   09.09   Studio: Pin up Assignment 1- Inspiration & Precedent Studies
Intro Assignment 2- Site Analysis
Th   09.12   Site Visit: 497 West 129 street
Sciame Lecture: Lawrence Vale

W4
Mon   09.16   Studio Desk Review

Th   09.19   Studio: Desk Review
Rudin Lecture: Alan Hantman

W5
Mon   09.23   Studio Pin up Assignment 2- Site Analysis
Intro: Assignment 3- Program & Concept Development
Th   09.26   Studio Desk Review

W6
Mon   09.30   Studio Desk Review
Th   10.03   No Classes

W7
Mon   10.07   Studio Present Assignment 3- Program & Concept Development
Intro: Schematic Design
Th   10.10   Studio Desk Review
Sciame Lecture: Jon Michael Schwarting & Frances Campani

W8
Mon   10.14   College Closed (Columbus/Indigenous Peoples' Day), no classes
Tu   10.15   Studio (Classes for a Monday schedule)
Th   10.17   Office Tour to AOR (Architecture Research Office)
Sciame Lecture: Anna Pashynska & Tania Pashynska

W9
Mon   10.21   Studio Desk Review
Th   10.24   Studio - Midterm Reviews
Intro: Assignments 4 & 5
Sciame Lecture: Nora Akawi

W10
Mon   10.28   Studio Desk Review
Th   10.31   **Mid-semester assessments**

W11
Mon   11.04   Studio Desk Review
Th   11.07   Studio Desk Review
Sciame Lecture: Sabine Malebranche

W12
Mon 11.11   Studio Desk Review
Th   11.14   Studio Desk Review
Sciame Lecture: TBD

W13
Mon 11.18   Studio MoMA Exhibition Tour
Th   11.21   Studio Desk Review

W14
Mon 11.25   Studio Pin up assignment 4&5 in progress. Pre final review
Th   11.28   College Closed (Thanksgiving), no classes

W15
Mon 12.02   Studio Desk Review
Th   12.05   Studio Desk Review

FINAL REVIEWS, Dec 9-13

Mon 9 Dec	Tues 10 Dec	Wed 11 Dec	Th 12 Dec	Fri 13 Dec
Advanced	**Core Studio 1**	**Advanced**	**Core Studio 3**	**Core Studio 5**
Stigsgaard, Brahmbhatt, Hackett Keramati	Horn (coord)	Edmiston, Bolhassani, Gebert	Wainer (coord)	Volkmann (coord)

Mon 12.16   Clean-up Day (all materials, projects, and any other items must be removed from studio)

Tu   12.17   End of Semester Assessment (faculty only)

Tu   12.17   Student Portfolios due for: SSA/CCNY Archive, etc. as directed by instructor

Fr   12.27   Final Grade Submission Deadline

GRADING/ATTENDANCE POLICIES AND STUDIO CULTURE

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 documented medical emergencies or other extraordinary circumstances. Excused absences and project delays must be officially cleared by the professor in advance to be considered valid.

Community Agreement:
● During the first full studio meeting, the professor will make time for an *Hour SSA* session for the JEDI Climate Survey.
● 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

Methods of Assessment:

- Attendance and participation in class discussions and other activities: 10%
- Project development in response to semester schedule: 60%
- Project presentation, level of completion and resolution: 30%
- Assessment will be based on quality of progress and the argumentation of each project, as well as on the final quality of design and presentation

Grading Assessment & Learning Outcomes:

- Students demonstrate the ability to respond to studio discourse and feedback in a consistent and clear manner throughout the semester as demonstrated in the evolution and development of design work.

- Students demonstrate the ability to utilize both digital and manual drawing and model-making techniques to precisely and creatively represent architectural ideas.

- Students demonstrate an 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.

- Students demonstrate the 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.

- Students 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.

- Attendance: Consistent level of preparation and on-time presence for each studio class and scheduled evening lectures.
- Portfolio: Completion of final portfolio or collection of studio work as directed by instructor and/or 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 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.

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.

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.

Notes:
D is the lowest passing grade for B. Arch 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 faculty member schedules 30 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 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 advisors:
Undergrad: Amy Daniel adaniel@ccny.cuny.edu
              Tony Bowles abowles@ccny.cuny.edu

Studio Culture:
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 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 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, 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). 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, Esq., 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. For more information, see: 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 following criteria from the 2020 NAAB Conditions are addressed in this course:

Program Criteria (PC) These criteria seek to evaluate the outcomes of architecture programs and student work within their unique institutional, regional, national, international, and professional contexts, while encouraging innovative approaches to architecture education and professional preparation.

> **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 and Innovation**—How the program prepares students to engage and participate in architectural research to test and evaluate innovations in the field.

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

CONTACT INFORMATION:

Professor Yalda Keramati
ykeramati@ccny.cuny.edu