

The Bernard & Anne Spitzer School of Architecture

CUNY

Type of Course: Class Meetings: Instructor: Location: Semester/Year Advanced Studio ARCH 51000 / ARCH 85101 / ARCH 92102 Mon/Thu 2:00-5:50 pm; Thursday lectures @ 5:30 pm Professor Julie Nelson Spitzer 206a Spring 2020

Blind Faith: Experiencing Place/ Informing Design



STUDIO OVERVIEW

The Queens Botanical Garden, located in Flushing, Queens, describes its mission as "an urban oasis where people, plants and cultures are celebrated through inspiring gardens, innovative educational programs and real-world applications of environmental stewardship". Located in the heart of one of the most vibrant and diverse neighborhoods in the country, the Garden serves as a community nexus and place of connection to the natural world.

This studio will use the Queens Botanical Garden as a point of focus for an intense investigation of place and how that investigation can inform the design process. We will explore how a building can serve as a teaching tool to heighten awareness of nature and cultural commonality while minimizing impact. We will use first person observation together with research and analysis as a means to understand how we know a site and how best to build there.

The studio will use the program for a new Education Building, currently being designed for the Garden by Julie Nelson and her firm BKSK Architects, as the basis for these investigations. This will give students the opportunity to work in parallel with the firm, and to benefit from the expertise of BKSK team members, project engineers and consultants as well as members of Garden staff. Because this studio is based on a deep understanding of site conditions, we will make several visits to the Garden in the course of the semester. Students will also be expected to make additional independent visits as required to supplement their own research and design process.

RESEARCH

The site of the Queens Botanical Garden has a fascinating ecological and social history. Located adjacent to what was once a salt marsh bordered by Flushing Creek, the area was biologically rich, home to a diverse collection of birds, insects, fish and plant life. In the early 1900s the area became an ash dump, a place to deposit the mountains of coal ash that was a by-product of the City's furnaces – this created a landscape so bleak and forlorn it was characterized by Fitzgerald in *The Great Gatsby*:

"This is the valley of ashes, a fantastic farm where ashes grow like wheat into ridges and hills and grotesque gardens; where ashes take the forms of houses and chimneys and rising smoke and, finally, with a transcendent effort, of men who move dimly and already crumbling through the powdery air."

The Garden is part of the Flushing Meadows/ Crotona Parks necklace of parks created by Robert Moses, who saw the opportunity to transform this industrial area including the ash dump, into a park that would host the 1939 World's Fair. The Botanical Garden has its origins in the 1939 World's Fair "Gardens on Parade" exhibit and was moved to its current site in the northeast corner of Crotona Park in 1961.

in 2007, the Garden completed its first major building project, the Visitor and Administration (V+A) Building, which was designed by BKSK Architects. This was the first civic building in the City to achieve LEED Platinum certification. As project manager and Associate in charge of that project, Julie Nelson has a deep knowledge of the project which will serve as a precedent for this studio's work.

The V+A was designed to be a built extension of the Garden's mission - to demonstrate environmental stewardship while celebrating the connection between cultures and plants. Since its opening, the building has become a living laboratory of sustainable building technologies including green roofs, photovoltaic panels, graywater and storm water systems, geothermal heating/ cooling and recycled and renewable materials. More than a demonstration project of sustainable technologies, the building serves the Garden's mission to teach principles of environmental stewardship in tangible ways to visitors that speak over 120 different languages.

In addition to its sustainable building education programming, the Garden runs an impressive collection of other programs that can serve as points of inspiration for your studio investigations. These include:

- A working farm that generates several thousand pounds of food annually that is donated to City Harvest
- NYC Compost Program run in collaboration with NYC Department of Sanitation. The garden provides training and Master Composter certification through its on-site programs.
- Ecological and habitat-based garden tours that teach students about plant and wildlife identification, wild edible plants, sustainable eco-systems and environmental citizenship.
- Bee Keeping
- Green Jobs training

PROGRAM

Preparatory Exercise 1, Site Investigation and Mapping:

We will begin by making two introductory site visits to the Garden. The first will be a general overview tour of the 39-acre site and will include an in depth tour of the V+A Building. The second visit will include a tour by Garden's educational staff, to learn about the Garden, plant collections, ecological habitats and how this informs their visitor education programs.

From these visits, each student will select a specific area of interest that will become the basis for semester long investigation and design work. Suggested areas for study include:

- Water
- Habitat
- Plant Life/ Ecology
- Sound
- Economy/ Waste
- Urban Agriculture
- Light/ Wind
- Resiliency/ Enclosure/ Shelter
- Cultural Connections/ Garden programming
- Other suggested by Students

To document research and observations of the site, each student will create a single comprehensive map that graphically combines historic information, existing conditions, personal observations and collected data built around

their chosen area of study. Students will consider traditional mapping techniques as precedents, and will be encouraged to develop their own graphic language.

Preparatory Exercise 2, Classroom Prototype:

Building on the investigations in the mapping exercise, each student will then design a single room proto-type classroom structure / site intervention that will demonstrate, through architectural design, aspects of your map related research to Garden Visitors.

Conditions permitting, we will have our review of this design exercise on site, at the Garden.

Comprehensive Design Exercise, The Education Building:

Each student will prepare a comprehensive architectural design for a new Education Building that expands on the themes developed through the classroom prototype exercise and mapping investigations. While there will be a prescribed program (that includes classrooms, a lab space, and exterior gathering spaces) the student may interpret the program as required to demonstrate specific aspects of their focused area of study. The students will select a site within the Garden that best supports the educational mission of their building.

REFERENCES AND RESOURCES

<u>General Resources:</u> Queens Botanical Garden MasterPlan: Atelier Driesitl/ Conservation Design Forum (2001) <u>Thermal Delight In Architecture</u>, Lisa Hershong (1999 MIT Press) AIA COTE Framework for Design Excellence International Living Future Institute Living Building Challenge (<u>https://living-future.org/</u>) Passive House Institute: <u>https://www.phius.org/</u> Center for Active Design, Active Design Guidelines: <u>https://centerforactivedesign.org/guidelines/</u> NYC Mapping: <u>http://gis.nyc.gov/doitt/nycitymap/</u> <u>The Visual Display of Quantitative Information</u>, Edward Tufte (2001 Graphics Press)

Water:

FEMA Flood Map Service Center

(https://msc.fema.gov/portal/search?AddressQuery=Queens%20botanical%20garden#searchresultsanchor)

Plant Life/ Ecology:

Botanical Highlights (<u>https://queensbotanical.org/botanical-highlights/</u>) Brave New Ecology (Landscape Architecture Magazine 2006) https://projects.iq.harvard.edu/files/retreat/files/deltredici_bravenewecology_lamfeb2006.pdf

Sound:

The Importance of Natural Soundscapes in National Parks: <u>http://npshistory.com/publications/sound/natural-soundscapes-overview.pdf</u>

Economy/ Waste:

Zero Waste Design Guidelines (https://www.zerowastedesign.org/)

Resiliency:

NYC Climate Resiliency Design Guidelines (https://www1.nyc.gov/assets/orr/pdf/NYC Climate Resiliency Design Guidelines v3-0.pdf)

WEEKLY SCHEDULE: M/TH 2:00-5:50 pm Note: schedule below is subject to revision through the duration of the semester.

W1	
Mon 01.27 Thu 01.30	LOTTERY in Rm 107 @ 2 pm, followed by first studio meeting Site Visit/ Tour: Queens Botanical Garden (43-50 Main St, Flushing, NY 11355) Note: Meet at the Garden at 2 pm 5:00pm. Convocation, Aaron Davis Hall
W2	
Mon 02.03	Studio/ Desk Crit: Mapping Exercise Portfolios DUE: 4 th year B.Arch students (by midnight, box in front of Rm 131)
Thu 02.06	Site Visit/ Tour: Queens Botanical Garden (43-50 Main St, Flushing, NY 11355) Note: Meet at the Garden at 2 pm
W3	
Mon 02.10	Studio/ Desk Crit: Mapping Exercise
Thu 02.13	Studio/ Final Review: Mapping Exercise 5:30pm. Lecture: Lucretia Montemayor
W4	
Mon 02.17	College Closed / Presidents Day
Thu 02.20	Studio/ Introduction to Prep Exercise 2/ Classroom Prototype 5:30pm. Lecture: V. Mitch McEwen
W5	
Mon 02.24	Studio/ Lecture by Matthew Richardson, BKSK Sustainability Coordinator: Passive design Strategies
Thu 02.27	Studio/ Desk Crit 5:30pm. Lecture: Carlo Bailey
W6	
Mon 03.02	Studio/ Desk Crit
Thu 03.05	Studio/ Desk Crit 5:30pm. Lecture: Sumayya Vally + Sarah de Villiers of Counterspace
W7	
Mon 03.09	On Site Review: Classroom Prototype Queens Botanical Garden (43-50 Main St, Flushing, NY 11355) Note: Meet at the Garden at 2 pm
Thu 03.12	Studio: Introduction to Comprehensive Design Exercise: Education Building 5:30pm. Lecture: DK Osseo-Asare
W8	
Mon 03.16	Studio/ Desk Crit
Thu 03.19	Studio/ Desk Crit 5:30pm. Lecture: Virginia Hanusik
W9	
Mon 03.23	Studio/ Desk Crit
	5:30pm. Lecture: Christian Benimana
Thu 03.26	Studio/ Desk Crit 5:30pm. Lecture: Vincent Boudreau and Lesley Lokko
W10	
Mon 03.30	Studio/ Desk Crit
Thu 04.02	Studio/ Desk Crit 6:00pm. Migrant Urbanisms Panel Discussion

W11

Mon 04.06	Studio/ Interim Review	
	5:30pm. Panel: Kelly Bair + guests	

04.08-04.16 SPRING RECESS

W12

Mon 04.20	Studio/ Lecture by E Candela/ J Vivino, BKSK - Methods of Architectural Communication	
Thu 04.23	ADVANCED STUDIO SHARING in Rm 107, 1:30-3pm; Studio	
	5:30pm. Lecture: Alessandra Cianchetta	

W13

Mon 04.27	Studio/ Desk Crit
Thu 04.30	Studio/ Desk Crit
	5:30pm. Lecture: Mae-ling Lokko

W14

Mon 05.04	Studio/ Desk Crit
Thu 05.07	In Studio - Final Review Practice Sessions
	5:30pm, Lecture: Hanif Kara + Simon Alfred

W15

Mon 05.11	FINAL REVIEWS
Wed 05.13	FINAL REVIEWS
Thu 05.14	Super Jury
Fri 05.15	Studio Clean-up Day

W16

TBD

Final Class Meeting, Exit interviews Studio Materials due for: SSA/CCNY Archive, Summer Show, etc. as directed by instructor

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 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: <u>https://www.ccny.cuny.edu/registrar/bulletins</u>

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 in the studio 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.

Noise Policy:

The studio environment should be a quiet and respectful place where all students can work and think in peace. At no time may students play music out loud in studio, even at a low volume. If you desire to listen to music, either during class hours or after hours, headphones are a requirement. Conversations must also be kept to a reasonable volume to respect classmates and those students in adjacent studios.

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: <u>https://www.ccny.cuny.edu/about/integrity</u> For citations, the Chicago Manual of Style is recommended: <u>http://www.chicagomanualofstyle.org/tools_citationguide.html</u>

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:

<u>Realm B: Building Practices, Technical Skills, And Knowledge.</u> 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.

<u>Realm C: Integrated Architectural Solutions.</u> 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 <u>www.naab.org</u> for additional information regarding student performance criteria and all other conditions for accreditation.

CONTACT INFORMATION:

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