Advanced Architecture Research and Design
BEYOND THE GATES: YOUTH | COMMUNITY | JUSTICE

Spring (A) 2021 ARCH UN3211
January 11 – February 26 M/W 9:00am-11:50am, F 9:00am-12:50pm
404 The Diana Center, Barnard College, Columbia University

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Advanced Architecture Research and Design will explore design at the intersection of architecture, youth, activism, and justice in the built environment. This immersive studio will engage with two unique New York City organizations, FC Harlem and Girl Be Heard, that are empowering the youth they work with in compelling and distinctive ways. This studio is an opportunity to experience and shape the design process in dialog with those you are designing for – the youth and the directors of these organizations. We will develop and lead workshops with the youth to learn how they see and experience the city and to hear what issues motivate them. Through this inclusive design process, we will develop projects that explore how architecture and design can support their needs, amplify their voices, strengthen their communities, and envision new opportunities for their futures.

FC Harlem is a specialized soccer organization for talented youth of color, providing opportunities to pursue soccer development at the highest level. The program has developed a model using small spaces of the city for urban fields to grow dynamic players and has long term goals to expand their spaces and programming. FC Harlem L.I.O.N.S. (Leaders In Our Neighborhoods) is focused on building competency and leadership skills on the field, in the classroom, and in their community.

Girl Be Heard was founded out of a theatre collective, Project Girl Performance Collective, that focused on global issues impacting women and girls in collaboration with youth advocates abroad. It offers free weekend and after-school theater for young women, girls, and trans / gender nonconforming youth. Girl Be Heard members can audition to be part an ensemble that collaboratively develops and performs works based on social justice.

This studio is an opportunity to consider broader questions about architecture and the design process, such as:

- Who is invited into the design process and whose voices are heard in that process?
- How can design and the design process support and strengthen communities?
- What is spatial justice and how can public space in the city better address the needs of the communities we are working with?
- What unique tools can architects, planners, and designers use to engage and empower communities to be active participants (co-designers) in design?
We will be working with Girl Be Heard and FC Harlem over the next seven weeks on two projects, both of which will include the design of an iterative engagement process as part of the work of the studio.

**Project 1: Design as amplifier**  
**Partner Organization:** Girl Be Heard  
**Prompt:** Design a temporary installation within existing public spaces and urban infrastructure that supports and amplifies the voices of Girl Be Heard’s youth performers. The installation can be a platform for a single event, a prototype for a network of events, or a project that collects and/or archives their voices/events over time. Your work will be informed through conversations and workshops with the company performers and the leaders of Girl Be Heard who are developing their own creative work on the theme of justice this year.

**Project 2: Design for community**  
**Partner Organization:** FC Harlem L.I.O.N.S (Leaders in our neighborhoods)  
**Prompt:** Working with FC Harlem players and leadership, develop design strategies for transforming their current spaces along the 145th street corridor in Harlem, including a brownstone and a playing field and field house, into a cohesive urban “campus.” FC Harlem strives to expand their programming and spaces for youth development on and off the soccer field, and your work will be instrumental in envisioning these opportunities with them.

Additionally, we are working in a time when the intersection of systemic racism, the climate emergency, and the pandemic have found us occupying the streets and other public spaces for protesting injustices as well as for expanded outdoor activities and relief from quarantined interiors. Are there opportunities through our work this semester to consider the design of more equitable, accessible, and sustainable public spaces? Are there opportunities to use these public spaces to amplify the voices of youth, to provide safe places for community, to support the wellbeing and care of ourselves and our community members, and to expand access to public space for all?

**Teaching Modality**  
This course will be taught in a hybrid-hyflex mode with occasional “touchpoints.” This means that all teaching will be online with an option to participate in in-person activities as well as some out of class activities.

**Asynchronous Learning**  
Please be in touch with the instructor if you will need accommodations for asynchronous learning. As a design studio with collaborative work, there will be a need for connecting with the class and your peers in a regular way.

**Notes on process and methodology during unprecedented times:**  
As a seven-week immersive studio, our pace will be fast and will require that your commitment to your work and to your peers be unwavering. We will be exploring new territories for an undergraduate design studio, and everyone is expected to embrace this challenge with openness, enthusiasm, and empathy. We are required to work remotely during the first two weeks of the semester, and we may need to do much of our work with our organizations online throughout the studio. When possible, we will take field trips to the site together, meet in the studio for pinups, and/or meet outside together. These in-person activities will either be simultaneously shared through zoom or recorded for those not able to join locally.

We are working with organizations who have generously agreed to open their doors to us. They are allowing us to join their meetings, they are agreeing to interviews and to showing us their spaces. Please respect this as we work with them; the expectation is for everyone to be on time and well prepared. They are very much looking forward to this collaboration and are eager to work together. It will be an exciting opportunity for all of us to learn from each other.
Learning Objectives
Students in Advanced Architectural Research and Design should be able, at an advanced level, to:
1. Visually communicate architectural concepts and design intent using discipline-specific techniques including:
   - orthographic projections (plans, elevations, sections),
   - paraline projections (axonometrics, isometrics),
   - physical models using various techniques and materials,
   - multiple media and/or combined representational strategies
2. Verbally communicate architectural research methods and spatial concepts
3. Demonstrate an understanding of precedent and site analysis
4. Demonstrate an understanding of design method as a step-by-step, iterative, and incremental process of research, synthesis, and feedback
5. Demonstrate an understanding of design thinking as responsive to and shaper of social and cultural contexts
6. Demonstrate the ability to work independently and collaboratively
7. Demonstrate an understanding of the historical and theoretical contexts for architectural representational conventions
8. Utilize a range analog and digital techniques in the design process
9. Demonstrate an understanding of program, use, and activity
10. Demonstrate an understanding of material and fabrication
11. Develop a research project with independently articulated design objectives.

Prerequisites
This is an advanced elective course for students in their senior year majoring in Architecture. Students must have completed Advanced Architectural Design I. Admission to the course is selective and based on an application submitted to the Department.

Course Requirements, Evaluation, and Grading:
- Project 1: 30%
- Project 2: 50%
- Participation / Discussions / Final Presentations: 20%

All work will be graded according to categories of conceptual strength, process and development, and final product. Participation and related process grades will take into account your willingness to engage with and discuss the work of your peers, your efforts to work collaboratively, your risk-taking, and your preparation.

Books:
- No required books

Materials:
- Any materials determined to be needed for workshops will be purchased by the Department. Any large format prints determined to be needed for this course will be printed by the Department.

Instructions for Accessing Apporto

Note for Advanced Architecture Research and Design Students: Individual computers have been moved from the DAL and set up in the studio for your individual use. Your assigned studio seat will include a computer that will be assigned to you for the duration of the course.

Barnard College Student Computing has implemented a new virtual computer lab platform, Apporto, that will provide students who are enrolled in architecture courses with remote access to the same academic software that is currently installed in the physical architecture computer lab (DAL) on campus.
In order to access these applications (e.g. Adobe Creative Cloud, Rhino 6, ArcGIS, etc.) please go to barnard.apporto.com and log in using your Columbia UNI and password. Once you are logged in, you will see two Virtual Lab desktop icons: BC GPU Virtual Desktop and BC Virtual Desktop. These two virtual environments have some common applications on both, but mostly contain different software for different types of classes. For software related to your architecture courses, please use BC GPU Virtual Desktop.

Instructions for requesting support and reporting problems:

If you have any issues logging into Apporto with your Columbia UNI credentials, please review these pages regarding resetting your UNI password and contact CUIT directly if you are unable to resolve the problem on your own.

If you can log into Apporto, but experience any issues opening or using the applications, please email BCIT at help@barnard.edu with a description of the problem and any relevant screenshots or screen recordings.

POLICIES AND STATEMENTS

Honor Code:

The Barnard Honor Code applies to all students in this class regardless of academic affiliation. Approved by the student body in 1912 and updated in 2016, the Code states:

We, the students of Barnard College, resolve to uphold the honor of the College by engaging with integrity in all of our academic pursuits. We affirm that academic integrity is the honorable creation and presentation of our own work. We acknowledge that it is our responsibility to seek clarification of proper forms of collaboration and use of academic resources in all assignments or exams. We consider academic integrity to include the proper use and care for all print, electronic, or other academic resources. We will respect the rights of others to engage in pursuit of learning in order to uphold our commitment to honor. We pledge to do all that is in our power to create a spirit of honesty and honor for its own sake.

We consider academic integrity to include the proper use and care for all print, electronic, or other academic resources.

To be clear, this means that any recorded class content — from lectures, labs, seminars, office hours, and discussion groups — is the intellectual property of your professor and your fellow students, and should not be distributed or shared outside of class.

The Columbia College Honor Code and the Columbia College Faculty Statement on Academic Integrity can be viewed here:

https://www.college.columbia.edu/honorcode
https://www.college.columbia.edu/faculty/resourcesforinstructors/academicintegrity/statement

Class Attendance, Late Arrivals, and Absences Policy:

Attendance is mandatory at all scheduled classes, field trips, and reviews. Studio is held Monday and Wednesday beginning promptly at 9:00 AM. Any student joining after 9:20 AM will be considered late and anyone that joins after 10:00 AM will be marked absent.

Absences due to acute illness, a personal crisis (e.g. a death in the family), religious observance, or for other reasons of comparable gravity may be excused. In all such cases, students must promptly email their instructor to communicate the reason for their absence and to arrange an opportunity to review any important information they may have missed.
Students who know they will miss one or more scheduled classes due to a religious holiday should meet with their instructor during the first week of classes to discuss their anticipated absences.

Unexcused absences, late arrivals, or early departures from class will reduce your course grade. Three non-consecutive absences will result in a grade reduction by one-third (1/3) of one letter grade (e.g., A- to B+). Three consecutive absences or four non-consecutive absences will adversely affect your final grade.

**Center for Accessibility Resources & Disability Services (CARDS) Statement:**
If you believe you may encounter barriers to the academic environment due to a documented disability or emerging health challenges, please feel free to contact me and/or the Center for Accessibility Resources & Disability Services (CARDS). Any student with approved academic accommodations is encouraged to contact me during office hours or via email. If you have questions regarding registering a disability or receiving accommodations for the semester, please contact CARDS at (212) 854-4634, cards@barnard.edu, or learn more at barnard.edu/disabilityservices. CARDS is located in 101 Altschul Hall.

**Affordable Access to Course Texts Statement:**
All students deserve to be able to study and make use of course texts and materials regardless of cost. Barnard librarians have partnered with students, faculty, and staff to find ways to increase student access to textbooks. By the first day of advance registration for each term, faculty will have provided information about required texts for each course on CourseWorks (including ISBN or author, title, publisher, copyright date, and price), which can be viewed by students. A number of cost-free or low-cost methods for accessing some types of courses texts are detailed on the Barnard Library Textbook Affordability guide (library.barnard.edu/textbook-affordability). Undergraduate students who identify as first-generation and/or low-income students may check out items from the FLIP lending libraries in the Barnard Library (library.barnard.edu/flip) and in Butler Library for an entire semester. Students may also consult with their professors, the Dean of Studies, and the Financial Aid Office about additional affordable alternatives for having access to course texts. Visit the guide and talk to your professors and your librarian for more details.

**Wellness Statement:**
It is important for undergraduates to recognize and identify the different pressures, burdens, and stressors you may be facing, whether personal, emotional, physical, financial, mental, or academic. We as a community urge you to make yourself—your own health, sanity, and wellness—your priority throughout this term and your career here. Sleep, exercise, and eating well can all be a part of a healthy regimen to cope with stress. Resources exist to support you in several sectors of your life, and we encourage you to make use of them. Should you have any questions about navigating these resources, please visit these sites:

- Barnard Students: https://barnard.edu/wellwoman/about
- Columbia Students: http://www.college.columbia.edu/resources (Click on Health-Wellness)
- Columbia GS Students: https://gs.columbia.edu/health-and-wellness
- Columbia SEAS Students: http://gradengineering.columbia.edu/campus-resources"

**Studio Teaching Methodology:**
Design is a unique type of knowledge production requiring unique working methods. This course is taught by the studio method – an iterative process that requires dialog, design production, and risk taking by the student to explore ideas in the form of a variety of media. The core method of instruction is that of 'desk crits', a one-to-one dialogue at the desk between the student and the Critic. At the desk crit, previous design work is reviewed and discussed and the student and critic formulate the next steps in the process. Desk crits are supplemented by Interim Reviews, or 'Pin-ups', where all students in the Section
(sometimes teamed up with another Section) present their design ideas for group critique and discussion. The culmination of each project is the Final Review in which students present their work for public evaluation by a group of Studio Critics and Visiting Critics.

Teaching Assistants will be conducting workshops focusing on techniques and methods relevant to ongoing projects.

**Room Rules and Security:**

*Note that all access to campus is governed by current campus health protocols, and these protocols may be revised by the College and University at any time.*

We are planning to implement new protocols for access to the studio in 404 Diana and the Digital Architecture Lab (DAL) through online signups and onsite swipe access through your school ID. We hope to be able to open these spaces to you in some limited capacity beginning January 25th. More information for this process will be communicated through the Architecture Department and your faculty.

Once access to these spaces is allowed, it is crucial that our standard safety procedures are followed, including that the doors to these spaces remain closed and locked at all times for your personal safety and your belongings’ security. Please do not prop open the door and do not leave any valuables unattended at your desk.

The studio and the DAL are open to all students in approved courses; please respect other critics and students that are using the space. Barnard and Columbia Public Safety officers do periodically check the studio but security is a responsibility that we all share; please help us maintain a safe and productive environment.

If your personal belongings are stolen (or go missing) please notify your instructor and Barnard Public Safety (for room 404 Diana) or Columbia Public Safety (for 116 Lewisohn).

Here is a sample of some general studio rules:

- You must provide your own lock for the locker.
- The studio must remain locked at all times.
- Use the spray hood in the model building room for spray paint or fixative.
- Use headphones for listening to music.
- You are responsible for keeping your desk and your storage area clean and organized. If you are using an empty desk adjacent to your assigned seat, it is also your responsibility to keep this area free of debris.
- 100% of the work surface of your desk space should be covered with 3-ply chipboard or vinyl board cover. Do not cut, carve, glue or otherwise destroy the plywood desktop.
- Please help us recycle and reuse extra materials by donating anything you don’t need to our recycling locations in the studios.