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Barnard and Columbia Colleges Architecture Department

ARCH UN2103.002 Architectural Design: Environments & Mediations | Spring 2022

T/TH 9am-11:50am | 404 Diana Center

Instructor: Lindsay Harkema | lharkema@barnard.edu | Office hours by appointment

Architectural Design: Environments & Mediations

Feeling all the feels

SAMPLE SYLLABUS

“Despite the fundamental function of architecture to provide protection for humans...and to give the support necessary for maintaining the vital functions of everyday living, the idea of the architect is linked to autonomy and independent genius rather than connectedness, dependency, social reproduction and care giving.”

--Elke Krasny

Care is everywhere. Recently, Care has become a buzz word within and beyond the discourse of architecture. As the discipline retreats from its patriarchal conventions of privileged form and singularity over support and interconnectedness, notions of Care have gained its attention as necessary if not obvious references for creating sustainable, communal environments. Historically gendered as female-no doubt due to an association with domesticity, childrearing, and maintenance-caring about Care has only recently become a mode of resistance and a means of flipping the script. In popular culture, the word has also been instrumentalized as tactic of persuasion, from disingenuous greenwashing to the neoliberal marketing of “self-care”.

Currently, public spaces are designed to be neutral, standardized spaces for passive use by a universal population. This generic, one size fits all approach often presents barriers for some by negating the specific needs of neurodiverse populations, people of color, women and children, the elderly, LGBTQ+ and gender nonconforming individuals, and other typically underserved groups. Focusing on the public realm, this architectural design studio will analyze existing conditions and explore possibilities for the built environment to better support a range of needs including emotionality, sensory sensitivity, individuality and connectedness.

These explorations will be understood as catalysts for design experimentation. Analog and digital methods of drawing and modeling will be used as complementary techniques of making. With attention to sensory experience, we will consider material traits such as tactility, softness, and interiority. Challenging conventional notions of functionalism, design investigations will preference ambivalence over purity and pluralism over singularity.

Through a series of design exercises, we will focus on techniques of making that facilitate a range of experiential conditions and modes of representation that convey their immersivity. Relatedly, we will consider how they contribute to a more inclusive and equitable built environment and the potential for architecture to become a facilitator of Care.



Pamela Concil, A Fountain for Survivors, 2021



Ernesto Neto, Celula Nave, 2009



b210 Architects, Rүүrum, 2021

Class Schedule

This schedule is for reference only and is subject to change throughout the semester. Details of each class meeting and the dates of pin-ups and assignment submissions will be confirmed by the instructor.

P = project, R = reading

1/18	T	(Zoom session) Course Introduction, P0 assigned
1/20	TH	(Zoom session) R1 discussion, P0 pinup
1/25	T	(Zoom session) R1 discussion, P0 pinup
1/27	TH	(Zoom session) Tutorial: Rhino
2/1	T	P0 final pinup, P1 assigned
2/3	TH	In-studio work/Desk Crits
2/8	T	P1 pinup, Tutorial: Drawings, Rhino to Illustrator
2/10	TH	In-studio work/Desk Crits
2/15	T	P1 pinup
2/17	TH	R2 discussion, In-studio work/Desk Crits
2/22	T	P1 Final Pinup, P2 Assigned
2/24	TH	Tutorial: Spatiotemporal Mapping, Illustrator In-studio work/Desk Crits
3/1	T	P2 pinup,
3/3	TH	In-studio work/Desk Crits
3/8	T	In-studio work/Desk Crits
3/10	TH	P2 Final Pinup
3/15	T	No class - SPRING BREAK
3/17	TH	No class - SPRING BREAK
3/22	T	P3 Assigned, In-studio work/Desk crits
3/24	TH	R3 discussion
3/29	T	P3 pinup
3/31	TH	Tutorial: Axonometric, Rhino + Illustrator
4/5	T	P3 pinup
4/7	TH	In-studio work/Desk Crits
4/12	T	P3 pinup
4/15	TH	Tutorial: Experiential Views, Photoshop
4/19	T	P3 pinup
4/21	TH	In-studio work/Desk Crits
4/26	T	In-studio work/Desk Crits
4/28	TH	FINAL REVIEW



Lucy McRae, Compression Carpet, 2019



Sarit Shani Hay, play landscape, 2020



Elena Tamburini, Filotea objects, 2019

Assignments Overview

Project 0/1: Transitional Objects/Spaces

A transitional object is an item, often a toy or stuffed animal, that provides psychological comfort and security to a child as they develop and gain awareness of the world. Contemporary psychology and neuroinclusive discourse extends the significance of physical tactility and sensory stimulation to the emotional experience of people of all ages, and an important component of how they perceive their surroundings and interact socially with others.

For Project 0, students will create a bodily device designed to mediate between the user and their environment, facilitating both comfort and tactile perception. As a continuation of this work in Project 1, students will expand the object into a small occupiable volume designed as a mediator between the individual and the environment.

Readings 1:

Elke Krasny, "Architecture and Care"

Joan Tronto, "Caring Architecture"

Donald Winnicott, "Transitional Objects and Transitional Phenomena", in *Playing and Reality*, pp. 1-14

<https://well.blogs.nytimes.com/2013/03/11/a-firm-grasp-on-comfort/>

Juhani Pallasmaa, *Eyes of the Skin*, pp.18-22,43-63

Ackerman, Joshua M., Christopher C. Nocera, John A. Bargh. "Incidental Haptic Sensations Influence Social Judgments and Decisions," *Science*. Vol. 328, 2010, p. 1712-1715.

Project 2: Spatiotemporal Mapping

For Project 2, students will analyze and map experiential conditions of a public space over time. They will observe the space over time taking note of various spatial criteria including the physical composition, experience and sensation, maintenance and routine, as well as the movement and behavior of various human and non-human actors and forces in the space. They will identify experiential rhythms, sensory loads, potential for over and under-stimulation. Students will document these phenomena in a layered drawing. Spatial information necessary to reveal relationships between static and transient elements as well as physical and non-physical phenomena should be included. From this layered drawing, students will produce an animation of the space over time.

Readings 2:

TBD

Project 3: Environments of Care

Having created a transitional object and spatial prototype in Project 0/1 and spatiotemporal mapping of a public/private space in Project 2, students will combine these considerations in the design of an architecture to facilitate an experience of care within a specific public context of the built environment. Building on the discourse of the studio, they will be responsible to define the spatial, functional, and experiential characteristics that will contribute to its performance as an Environment of Care.

Readings 3:

Jane Rendell, "The setting and the social condenser: transitional objects in architecture and psychoanalysis," in *Reading architecture and culture*, ed. Adam Sharr. London, New York: Routledge, 2012, p. 136-146.

Alexandra Lange, "What It Means to Design a Space for 'Care'", Bloomberg Citylab. 4 Nov 2021, <https://www.bloomberg.com/news/features/2021-11-04/what-care-means-in-design-planning-and-architecture>

Prerequisites

This is an introductory level design studio for students interested in thinking about architecture and is required for those majoring in Architecture. There are no prerequisites, with the exception of a passion and a will to speculate. It is generally recommended for the sophomore year, and can be taken before or after Architectural Design: Systems and Materials. Systems and Materials and Environments and Mediations complement each other, with the former concentrating on material

assemblies, techniques of fabrication, and systems of organization and the later on modes of visualization, technologies of mediation, and environmental transformations.

Learning Objectives

Upon the completion of this course, students should be able to:

- Demonstrate an understanding of design method as a step-by-step, iterative and incremental process of research, synthesis, and feedback that requires experimentation and risk taking
- Visually communicate design concepts and design intent using discipline-specific techniques of representation.
- Utilize analog and digital modeling and visualization techniques in the design process
- Demonstrate the ability to record relations, transformations, and environments.

Design and Technical Skills

The studio curriculum offers an introduction to fundamental design and technical skills. Tutorials and resources will be offered for both in and outside of class learning to build familiarity and comfort with digital tools. In addition to in-class instruction and technical demonstration by the instructor and TA, DAL Assistants will provide workshops and pre-recorded tutorials focusing on relevant techniques and methods. These sessions are optional but you are strongly encouraged to attend.

Students in this course are expected to gain proficiency in the following:

Analog

- Freehand Sketching
- Physical modeling

Digital

- 3D modeling using Rhino
- 2D architectural drawings: Plans, Elevations, Sections
- 3D architectural drawings: Axonometric, Isometric, Perspective, etc.
- Line drawings using Adobe Illustrator
- Analytical diagrams
- 2D/3D Perspectives and Collages using Adobe Photoshop + Illustrator

Studio Teaching Methodology

This course is taught by the studio method, which necessitates synchronous in class learning and asynchronous independent and collaborative work. Group discussions, design tutorials and feedback will occur during the scheduled class time. The core method of instruction is that of desk crits, pinups, and group discussions. A desk crit is a dialogue between one or more students and the faculty (also described as “Studio Critics”) and/or teaching assistant (TA). At the desk crit, previous design work is reviewed and discussed and together the student and faculty formulate the next steps in the process. Pinups are group dialogues in which all students in the studio present their work and ideas for group critique and discussion. Additional group discussions may take place in response to a reading assignment, lecture, or tutorial. 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.

During the Spring 2022 semester, this course will be held online and in person utilizing collaborative digital tools such as Zoom and Miro. The first two weeks of the semester will take place entirely on Zoom, after which class meetings will take place in person at the Diana Center unless otherwise determined. Attendance at all Zoom and in person sessions is mandatory.

Each student will have a desk in 404 Diana and is expected to work in the studio during and outside of class meeting times, employing your peers as critics. You will be expected to equip your desk with the necessary tools and materials for your projects.

Grading

Students will be evaluated on their own capacity to fulfill the course goals, not only requirements. Architectural study and practice require more than simply meeting assignment requirements, but also demonstrating a strong engagement with the broader disciplinary ideas and a commitment to the techniques and methodologies introduced in this class. Students will need to develop their critical thinking skills, analytical comprehension, and rigor in the process of making the projects. These exercises are based not only on a final product, but on the daily progression and evolution of the work, and an active process attitude. It is crucial that all students work consistently.

Each project will be graded with a letter grade, based on the following criteria:

Concept: Critical thinking skills and analytical rigor.

Work Process: Iterative design process, ability to respond to input and develop project.

Presentation: Ability to articulate ideas visually and verbally.

Course Grade Breakdown:

Project 0/1	25%
Project 2	25%
Project 3	25%
Process & Participation	25%

Equipment and Materials

Students are responsible to procure the necessary physical and digital materials and tools for their work, per the guidance and assistance of the instructor and TA. The suggested list below contains items that will be useful throughout your careers as designers, and should be considered investments in quality tools. If you are uncomfortable purchasing any of these items, please check with the Department Assistant about borrowing used equipment.

Computer/Laptop with required software: Rhino 3D, Adobe Illustrator, Photoshop (available in DAL computer lab, 401 Diana)
Sketchbook, minimum size 5"x8"
Architects' scale (6 sided)
12" roll of white tracing paper
Pens, pencils, lead holders, erasers per your discretion
X-acto, Olfa or similar utility knife with replacement blades
24" metal ruler with cork backing
Self-healing cutting mat
Model making materials (as needed per assignments)

Suggested places to purchase supplies:

Blick Art Materials, <https://www.dickblick.com/>

Canal Plastics Center, <https://www.canalplastic.com/>

Amazon, <https://www.amazon.com/>

Utrecht, <https://www.utrechtart.com/>

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.

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>

The Barnard Honor Code includes relevant language for the proper use of electronic class material:

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.

Attendance

Attendance is mandatory at all scheduled classes. Students arriving more than 20 minutes after class begins will be marked late, and more than 1 hour late will be marked absent.

Absences due to acute illness, a personal crisis, religious observance, or for other reasons of comparable gravity may be excused. For religious holidays, students should email their instructor during the first week of classes with a list of dates for their anticipated absences. In all other cases, students must promptly email their instructor to communicate the reason for their absence and are responsible to consult their peers for any important information they may have missed.

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.

Please note that we cannot assume that a student with extensive absences will drop a course. Dropping a course can adversely affect a student's status in the university (from full-time to part-time, for example) and that can affect their financial aid and other types of support.

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 course 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

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>

Laptop Policy

Use of personal laptops, computers, or school-provided equipment in computer labs is necessary to complete the assignments for this course. Students may use personal laptops in class for course-related purposes only. All personal devices should be used in a way that is appropriate and respectful of class conduct.