

Type of Course: ARCH 51000 Advanced Studio
Class Meetings: M/TH 2:00-5:20pm
Office Hours: M/TH 5:20-6:20pm and/or by appointment
Instructor: Professor Preston / Volkmann
Location: SSA 318
Semester/Year: Spring 2024

THE ARTEFACTORY LAB: micro scale

IPA: /ar.ta'fæk.tər.i/

arte "by or using art," "space in between" + facere/factor+y "place of doers, makers"

OVERVIEW



The most engaging Architecture is arguably the one to which tactile concepts are applied. Tangibility relies upon keeping craft in mind while designing. The detail is paramount to connecting architectural experience (you – the subject) with material strategies (it – the object). As we know, Architecture is more than the sum of its parts. Physical architecture must be a discipline of artistic joinery.

As in composing music, it is paramount to develop rules (and to break them). If notes or sounds were only added randomly, we would seldom perceive them as music. Motives (and semiotics) have to be developed as conceptual materialization strategies, with intellectual technique. The awareness of how to articulate rules is crucial to design. We will attempt to test such rules on a small test project, your "design artefact."

COURSE DESCRIPTION



We will investigate different ways of understanding architectural motives and develop a systematic (1) "vocabulary of details," which is set-up to become a catalogue of tangible solutions. We will learn how to take advantage of details in relation to an overall parti.

We will start by looking at how material solutions are related to tools and common fabrication methods as they reflect history – from making with hands to making with machines. We will categorize these investigations and develop a framework to utilize the details evocatively.

We will apply a particular part of this investigation and (2) design to a walkable/utilizable artefact related to our human bodies. We will develop a design narrative to relate the detail scale to the overall scale of design and investigate the particular relationship between different realms of design.

METHODOLOGY

[Step 1] – Vocabulary Catalogue



We will start the process by using Gottfried Semper's "Style in the Technical and Tectonic Arts - or Practical Aesthetics," (1863) as a template. In this book, Semper differentiates "modes of making," according to their use in a building:

- | | |
|---|---|
| (1) Masonry (Stereotomy) to mound and base | (3) Carpentry to roof and structure (Tectonics) |
| (2) Ceramics and metallurgy to hearth and kitchen | (4) Weaving to enclosure |

We will systematically expand on these categories, based on actions of fabrication:

- Stacking – the action of the mason
- Weaving – the action of the weaver and fabric maker

- Folding – the action of the tinsmith
- Connecting – the action of the woodworker, metalworker, or tailor
- Molding – the action of the founder, the sculptor, or plasterer
- Blowing – the action of the glass blower
- Engraving – the action of the decorator, or of the (wood) carver
- Tiling – the action of the tiler, or of the decorator
- Pivoting – the action of the metalworker, or of the cabinet maker
- Covering – the action of the painter, or plasterer
- Perforating – the action of the tinsmith
- Etc. [We will add to these classifications based on your input]

Not only are these categories related to actions of fabrication. They have intrinsic geometric effects on an overall organization, and implications on architectural expression due to our phenomenological consciousness. We will investigate the physics and metaphysics of diverse material approaches to develop architectural vocabulary:

What ways of treating a material are (and: were / will be) at all possible?

What is the result of each particular treatment? How can certain “material natures” be emphasized?

[Step 2] – Design Artefact

The analysis leads to a critical investigation of whether the categories overlap and/or influence one other. Your catalogue will act as a catalyst for your own thought relative to the issues of spatial depth, transparency, continuity, reflection etc. The cross examination of techniques reveals hybridization of design processes. Are hybridizations / juxtapositions / synergies / transitions / repetitions necessary to form a creative whole?

From the beginning of the semester, you will search for a design topic and program that allows you to express motives of materialization. You will generate spatial artefacts replete with information for subsequent architectural ‘projects.’ Neither program nor material are given to you, but will emerge from understanding the possibilities and benefits of particular materialization strategies. You will mine your own individual experiences to date and design from your own particular perspective. The design artefact may ultimately be an exhibit booth, a small pavilion, a performance space, etc. The maximum project is limited to 12’ x 12’ x 12’.

Documentation requirements:

- Large-scale plan(s), section(s), elevation(s)
- Models and detail models
- Detail catalogue and overview of alternatives
- Axonometric system drawing(s)
- Key details
- Diagrams of system and construction sequence
- Spatial and material representations (ext./int.)

RESEARCH

- Comprehensive Design: Exploring design by demonstrating unique linkages between space making and construction systems to generate form, program, and detail
- To begin to understand and construct space as an immersive environment
- Material Innovation + Research: Developing new techniques for materials by cross-examination and haptic understanding of production
- Influence form finding skills by hands-on research
- Case study analysis: Understand projects based on detail resolution and by analytic comparison
- Categorization of Design Principles

WEEKLY SCHEDULE, M/TH 2:00-5:20pm

Note: schedule and assignments below are subject to revision throughout the duration of the semester.

W1

Th 01.25 **Advanced Studio lottery in Rm 107, followed by first studio meeting**
Assignment: case study collection related to material strategies; principal diagrams
Spitzer School Convocation @ 5:00pm – all students and faculty expected to attend

W2

Mon 01.29 Desk crits / pin-up

Th 02.01 **Making SSA: All school event during studio time/don't include any studio activities or assignments on this day**

W3

Mon 02.05 Pin-up: case studies and techniques: diagrams, research, investigation of material strategies

Assignment: sketch models (3 iterations) and documentation of key details

Th 02.08 Desk crits / pin-up

W4

Mon 02.12 College Closed; no class

Th 02.15 Coordination of representation of material strategies: axonometric overall system

W5

Mon 02.19 College Closed; no class

Th 02.22 Studio pin-up: material strategies; discussion of catalogue organization

W6

Mon 02.26 Desk crits: square vignettes; corrections/add-ons; categorization system discussion

Assignment: enlarged section(s)

Wed 02.28 Studio pin-up: catalogue and working models

Th 02.29 Desk crits: working models related to catalogue studies; "postcard"; proposal description

Assignment: large section(s)

W7

Mon 03.04 Desk crits / pin-up: development of sectional sketches/elevations

Related diagrams of techniques/models; structure studies

Th 03.07 Desk crits: schematic design of artefact proposals: sections/elevations

W8

Mon 03.11 Desk crits / pin-up

Th 03.14 Desk crits: development of artefact project

Assignment: review project narrative + schematic design

Instructors issue mid-semester assessments to all students

W9

Mon 03.18 Work in class: desk crits / pin-up

Th 03.21 Work in class: desk crits / pin-up: discussion of approaches

Assignment: prototype + iteration

W10

Mon 03.25 Work in class: desk crits / pin-up

Th 03.28 Desk crits / pin-up (individual critique; discussion of refinement strategies)

W11

Mon 04.01 **Review with guest critics: schematic design artefact; all assignments**

Th 04.04 Work in class: desk crits; review of guest critic comments

W12

Mon 04.08 Work in class: desk crits/ review of pin-up with guest critics
 Th 04.11 Work in class: desk crits / pin-up

W13

Mon 04.15 Work in class: desk crits / pin-up
Assignment: *layout for final review*
 Th 04.18 Work in class: desk crits/pin-up; element protection/update details
 Organization/time management: drawing set for final review

04.22-04.30 Spring Recess, no classes

W14

Th 05.02 Desk crits: presentation concept adjustments + red-lining

W15

Mon 05.06 Desk crits: presentation concept adjustments + red-lining

FINAL REVIEWS, May 9-15**FINAL EXAMS, May 16-22**

Th 9 May	Fri 10 May	Mon 13 May	Tues 14 May	Wed 15 May
Core Studio 2	Advanced	Core 6	Core Studio 4	Advanced
Jow (coord)	Preston/Volkmann Wainer Terragni Hocek	Horn (coord)	Haferd (coord)	Edmiston Llonch Topolnytska

Key End of Semester Dates:

W 05.15 Last day to withdraw from course with a grade of "W"
 Th 05.16 Studio Clean Up day (students & faculty)
 Fri 05.17 End of Semester Assessment (faculty only)
 Mon 05.27 College Closed
 Fri 05.28 Final Grade Submission Deadline

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

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 to be considered valid.

Community Agreement:

- 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%

Grading Assessment & Learning Outcomes:

- **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.
- **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.
- **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.
- **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.

Additional Graduate Requirements:

All M Arch I second and third year students and all M Arch II students are required to submit a portfolio (Date TBD). 2nd-year students must submit a hardcopy portfolio to Hannah Borgeson's office by 5pm. 3rd-year students and M Arch II students may submit either a hardcopy portfolio or email a link to a digital portfolio to hborgeson@ccny.cuny.edu. Digital submissions must be a link, not a file attachment.

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:

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, 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 Zinnat Sultana: zsultana@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 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.

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 skills associated with making integrated decisions across multiple systems and variables in completion of a design project. This demonstration includes problem identification, evaluating criteria, analyzing solutions, and predicting the effectiveness of implementation.

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:

Adjunct Prof. Steve Preston (spreston@ccny.cuny.edu)

Prof. Christian Volkmann (cvolkmann@ccny.cuny.edu)

Library Contact: Prof. Nilda Sanchez (nsanchez@ccny.cuny.edu), 212-650-8766