

**School of Architecture | College of Architecture | Georgia Institute of Technology**  
**ARCH 4515. Collaborative Design Workshop | Live Projects (3-0-3)**

**Sabir Khan**

Architecture is not a static object but a moving process  
*Bruno Latour*

Architecture is a response to a concrete problem, *a situation in transformation*, in which [the designer] participates  
*Alvaro Siza y Vieira*

I was horrified to realize that I had never really thought about a staircase . . .  
*Rem Koolhaas*

The goal of this workshop is to provide a platform for ARCH minors to engage with and fully participate in a “live project”: an architectural design situation that requires students to navigate the multiple external “working” relationships (clients, users, fabricators) and constraints (codes, budgets, materials, structure, construction) that typically configure and reconfigure design intentions and desires as they move toward an architectural resolution.

Students will work on an architectural element -- an entrance, threshold, door, window, balcony, ceiling, roof, stair, ramp, elevator, corridor, fireplace -- in a specific situation somewhere on campus.

The advantages of using an architectural element are several: they offer a relatively small and circumscribed problem space; they encapsulate millennia of architectural exploration and offer a rich archive of precedent and possibility; and, as discrete building parts or technologies that have evolved in response to disparate architectural and non-architectural factors, they bring other stories into the mix.

The tension between the archetype and the particular, between, for example, the generic “problem” of a door and a particular instantiation, will activate the design space for each student, prompting empirical, typological, historical, dimensional, and material research and speculation as well as encouraging diverse modes of working, thinking, doing, making, and communicating.

**Pedagogical Goals**

Provide an opportunity for ARCH minors to:

- Enact the design process
- Engage, as protagonist and agent, the network of people, artifacts, actions, and spaces within a given situation
- Reprise the learning from the other four courses taken as part of the minor
- Apply knowledge and skills from their own majors
- Collaborate with majors from diverse disciplines as well as with ARCH majors who could take this course as an elective

## Learning Outcomes

"Wicked" problems have no definitive [or determinate] formulation, but every formulation of a wicked problem corresponds to the formulation of a solution

*Horst Rittel*

[Design] Learning is not about acquiring or accumulating information. Rather, learning is principally a matter of keeping pace with one's evolving circumstances

*Brent Davis, Dennis Sumara, Rebecca Luce-Kapler*

An ability to formulate the "problem" and the "solution" in tandem, with each informing, clarifying, amplifying, and constraining the other

An awareness of the dialogical nature of the architectural design process -- in contrast to the more "linear" models of design process prevalent in many design disciplines and practices where it is typically conceived as two distinct and sequential phases: problem definition (analysis) and problem solution (synthesis)

An understanding of both the inter-disciplinary and the collaborative nature of architectural practice

An appreciation of the complexity of architectural practice -- how buildings come to be -- and the various positions an architect may assume with respect to the work and to the process: auteur, mediator, translator, collaborator, coordinator, consultant, etc

An appreciation of the rich and varied archive of architectural precedent and practice and its capacity to inform and inspire

## Course Requirements

Students will be expected to:

- Attend and fully participate in the two eighty-minute sessions each week
- Keep a Design Logbook to log work done, take notes on discussions, record thoughts, questions, and speculations
- Write Meeting Notes to share with their teams and with the instructor
- Document the entire process
- Make regular presentations of both the process as well as the evolving architectural solution to the class as well as to invited critics and specialists

At the end of each three-week module, students will turn in a Report that compiles and annotates the work done for the assignments as well as the material recorded in the Design Logbook during the three-week period.

At the end of the semester, students will:

- Present their project during the School of Architecture's Jury Week
- Prepare and turn in a Project Portfolio formatted for both online and print
- Write an 1000-word Reflection Essay

## **Course Schedule and Grade Breakdown**

### *Weeks 1-3*

*Lectures / Discussions:* The Elements of Architecture: Concepts; Theories; Histories

*Research Assignments:* Typologies; Standards; Styles; Materials; Technologies

*Report 1:* 15% of final grade

### *Weeks 4-6*

*Lectures / Discussions:* The Particular Situation: Objects, Bodies, Actions, Performance

*Research Assignments:* Empirical research through observation, measurement, description, and analysis

*Report 2:* 15% of final grade

### *Weeks 7-9*

*Work Sessions:* Scoping and Staking the Problem Space / the Solution Space

*Design Assignments:* Propositions, Iterations, Tests

*Report 3:* 15% of final grade

### *Weeks 10-12*

*Work Sessions:* Development

*Design Assignments:* Prototypes, Models, Details

*Report 4:* 15%

### *Weeks 13-15*

*Work Sessions:* Fabrication, Installation

*Design Assignments:* The Argument; The Presentation

*Report 5:* 15%

### *Week 16*

Project Portfolio: 15%

Reflection Essay: 10%

## **Evaluation**

Students will receive a written evaluation and grade for the five Process Reports (to be turned in at the end of each module) as well as on the Project Portfolio and Reflection Essay turned in at the end of the semester.

## **Exams, Readings, Resources**

There are no exams. The Project Portfolio and Reflection Essay will be due Week 16 in lieu of a Final Exam. Readings assigned for discussion will be available on T-Square. Access to software will be provided through the COA Virtual Lab. Access to the COA shop will be provided upon completion of a safety tutorial.