

3502: Architectural Design Studio V

Abstract / concrete: materiality and logic of construction

Studio Statement

"The discovery of meaningful architectural order should occur in the realm of perception, through the operations of making, of "concrete poetry" or poesis, derived from the challenge of materials and techniques.....(edited by KT)..... Embodied making, involving a mind in a body, its flesh, pleasure and pain, searching for an order rooted in history, perception and materiality, is the opposite of the construction of an object or building through the implementation of conceptual, methodological tools, and formalist or technological processes. The product might represent a technique in the first instance, but the personal techniques endowed with a theoretical and historical content, and implemented in the project as deliberate acts of discovery, will become pregnant with meaning."

Alberto Pérez-Gómez, "MODERN ARCHITECTURE, ABSTRACTION, AND THE POETIC IMAGINATION"

performance [pər'fɔrməns] noun

1 an act of staging or presenting a play, concert, or other form of entertainment

2 the action or process of carrying out or accomplishing an action, task, or function

A building performance is not simply a technical predictability of its structural and environmental behavior nor an aesthetic legibility of the design ideas. It is an action, an ingenious response to various internal and external forces as they seek equilibrium through time.

Recent technological obsessions in architecture fueled by the perforation of sophisticated structural, environmental and visual computer simulations re-ignited the interest in building performance. However, these trends tend to limit its potential by merely re-affirming the old functionalist thinking - predicting the predictable. A good musical performance has an element of surprise, an unexpected experience as it is a response to the audience and the context. So does the performance of a building.

This studio will examine the complex nature of building performance through focused iteration, cultivating student awareness to temporal-spatial quality of physical construct as they develop technical proficiency in architectural design. The emphasis is on tactical design skills dealing with quantitative internal equilibrium - structural, environmental and material as they responds to socio-political forces such as program, codes (zoning, building, life safety, energy) and economy (initial, life cycle).

Through phenomenal qualities such as materiality/texture, light/shade, time/sequence, scale/proportion and spatial/structural order, architecture aims to evoke an emotional and intellectual response far beyond the basic human need for shelter. The pedagogical intention of the studio is to acknowledge the divide between phenomenal qualities of physical construct and representational methods employed in the design process. The studio intends to exploit this difference as a possible source for architectural inquiries.

The Project

The studio will participate in the "Building Element" category of the third annual CONCRETE THINKING FOR A SUSTAINABLE WORLD, International Student Design Competition, administered by ACSA and sponsored by the Portland Cement Association. The program is intended to challenge students to investigate an innovative application of portland cement-based materials to achieve sustainable design objectives.

First phase of the studio (duration: 4 weeks) will engage in experimental fabrication of full scale "surface modules" as a mode of investigation into "materiality" of concrete. It will be accompanied by a series of lectures to inspire the experiments and to supplement the theoretical understanding of the material. Concrete casting will be performed during the studio under the supervision of the instructor as a corroborative effort.

Second phase of the studio (duration: 11 weeks) will consist of designing a building of moderate complexity in urban context. Implementation of surface modules as a building component will be speculated and developed through computer modeling and detail drawings. Final (3) weeks will be dedicated for composing and refining presentation boards for the competition submission.

"Performance" is an empirical process of improvisation and adjustment through trial and error, a self discovery process. "Student Performance" in this studio is also evaluated as such. Disciplined, self-directed recovery from a spectacular error is valued over mediocre success merely following the instructions.

Studio Information (addendum to course syllabus)**Instructor:**

Name: Kentaro Tsubaki, R.A., Assistant Professor
 Office: RM 609, ARCHITECTURE BUILDING
 Office Hours:
 MW 11:30AM-1:00PM (other times by appointment only)
 Office Phone: 806-742-3169 x256
 E-mail address: kentaro.tsubaki@ttu.edu
 Course Website:
http://web.mac.com/ktsubakix/KT_Studio_KT/+Courses.html

Expected Learning Outcomes:

Ability to produce schematic building design (Pre design development level in professional terms) consisting of key design details and physical mock-ups, representational drawings and models, process studies; verbal presentations at formal reviews.

Equipments / Software / Materials:

Laser or ink-jet printer at your desk in studio.
 Digital Camera w/ minimum of (2MG) pixel resolution.
 3D modeling software: auto•des•sys form•Z, AutoCad, Rhino, 3DMax
 2D graphics software: Adobe Creative Suite (Photoshop, Illustrator, Acrobat, etc.)
 Rolls of white or yellow trace
 Basic model-making materials and tools
 Basic construction materials and tools: concrete mix, hydro-cal, metal mesh and re-bars, plywood, MDF, Ridged foam insulations, plastic tub, shovels, plastic tarp, buckets, hoe etc.

Digital Portfolio:

Digital scans, drawings, and images of physical models will be submitted according to specified formats at designated times throughout the semester. Files should be uploaded to the server at: \\archlab\KT_3502

Readings and Articles:

Will be assigned throughout the semester and posted on the course website.

Grading/Evaluation:

Evaluation of student performance in Arch 3502 is based upon daily studio process as well as the product. Improvements and growth are the keys. Professor Tsubaki will conduct his expert assessment of overall student performance following each major stage of the semester. Note that this is not a quantifiable, exact, mathematical assessment. It is based on experienced judgment of student work. The following general criteria will be considered: (1) strength of idea; (2) articulation and development; (3) technical competency, clarity, and craft; (4) concise verbal/written presentation; (5) passion, commitment, dedication and work ethic. All requirements and deadlines must be met in a timely manner. There will be no extensions to due dates. Late or incomplete work will result in a substantial reduction of the semester grade defined as follows:

A (excellent) exceptional performance; strongly exceeding the requirements of the course, showing strong academic initiative and independent resourcefulness.

B (good) performance above the norm; accurate and complete; beyond the minimum requirements of the course; work demonstrates marked progress and initiative.

C (average) satisfactory work that adequately meets minimum requirements and demonstrates satisfactory comprehension, communication skills, and effort; demonstrates little initiative to investigate the problem without substantial prodding of the instructor; work shows little improvement.

D (inferior) unsatisfactorily meets minimum requirements; demonstrates minimum comprehension, communication skills, and effort at an inferior level; initiative lacking; improvement not noticeable.

F (failing) does not meet minimum requirements; fails to adequately demonstrate comprehension, communication skills, and effort.

Studio Calendar (subject to change/adjustment)

Meeting	Date	Agenda	CoA Events
Week 1			
1	01/09/08	Studio Introduction/Lottery	First Day of Classes
2	01/11/08	Phase I	
Week 2			
3	01/14/08		
4	01/16/08		
5	01/18/08		
Week 3			
	01/21/08	No Meeting	Martin Luther King Jr. Day
6	01/23/08		
7	01/25/08		Last day to drop a course and receive a refund
Week 4			
8	01/28/08		
9	01/30/08		
10	02/01/08		
Week 5			
11	02/04/08	Review Phase I	
12	02/06/08	Phase II	Last day to withdraw and receive partial refund
13	02/08/08		
Week 6			
14	02/11/08		
15	02/13/08		
16	02/15/08		
Week 7			
17	02/18/08		
18	02/20/08		
19	02/22/08		
Week 8			
20	02/25/08		
21	02/27/08		
22	02/29/08		
Week 9			
23	03/03/08		
24	03/05/08		
25	03/07/08		
Week 10			
26	03/10/08		
27	03/12/08		Last day to drop a course
28	03/14/08	Mid-term Review	
Week 11			
	03/17/08	No Meeting	Spring Break
	03/19/08	No Meeting	Spring Break
	03/21/08	No Meeting	Spring Break
Week 12			
	03/24/08	No Meeting	No Class
29	03/26/08	Phase II	
30	03/28/08		
Week 13			
31	03/31/08		
32	04/02/08		
33	04/04/08		
Week 14			
34	04/07/08		
35	04/09/08		

	36	04/11/08		
Week 15				
	37	04/14/08		
	38	04/16/08		
	39	04/18/08		
Week 16				
	40	04/21/08		
	41	04/23/08		
		04/24/08		Last Day to Withdraw from the University
	42	04/25/08	Final Review	
	43	04/26/08	Final Review	
Week 17				
	44	04/28/08	Final Review	
		04/29/08		Last Day of Classes
		05/06/08	4:30-7:00 PM Final Exam Time Individual Student - Instructor Meeting	Spring Semester Ends
		05/07/08		Noon, final grades for Graduating Students
		05/12/08		3 p.m., final grades due for Students