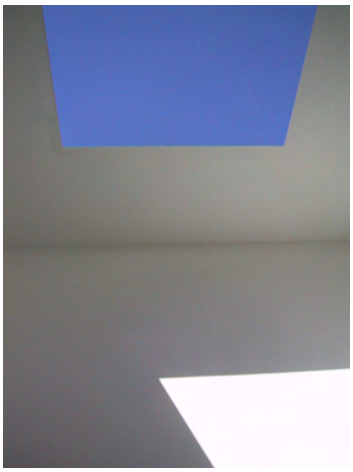
3501: Architectural Design Studio IV
Building Performance Studio

Studio Syllabus

"Nature in the form of water, light, and sky restores architecture from a metaphysical to an earthly plane and gives life to architecture. A concern for the relationship between architecture and nature inevitably leads to a concern for the temporal context of architecture. I want to emphasize the sense of time and to create compositions in which a feeling of transience or the passing of time is a part of the spatial experience. "

Tadao Ando, "From the Periphery of Architecture"



performance |pər'fôrməns|, 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 or 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, this trend tends 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 aims to examine the complex nature of building performance through focused iteration, cultivating student awareness of the temporal-spatial (phenomenal) quality of a physical construct as they develop technical proficiency in the design process. We will focus on the **Tectonics of Structures** as it relates to **Performance of Light** this semester.

The first phase of the studio (duration: 4 weeks) will engage in a group research on building precedents and individual building analysis. Interpretation of the analysis and construction of a "Light Filtering Device" will follow. The observational records of its phenomenal performance will be documented as "Light Drawings." A discourse on architectural diagrams as a generative tool will serve as a transition.

The Second Phase of the studio (duration: 11 weeks) will be an infill project of modest complexity focused on the structural systems and the envelopes. We will engage in designing the **New Roof Structure for the existing Texas Tech Swimming Pool**, a communal project for the 3rd year. In particular, the performance of the roof assembly as a "Light Filtering Device" will be examined, as the interplay of light and shadow is a crucial to the materiality and the tectonics of the building.

Field trip to Dallas / Ft. Worth metro area to visit the following institutions, renowned for the way the buildings embody light will be required: The Rachofsky House, Nasher Sculpture Center, The Modern Art Museum of Fort Worth, Kimbell Art Museum

This studio will require an extensive use of both, traditional form of modeling as well as computer modeling. Google Sketch-Up **will not be accepted**. The interface and data structure does not lend itself for a precise construction. It is not suitable for a sophisticated design exploration / fabrication required in this studio. You must be willing to learn and use one of the following 3D software in conjunction with the Digital Media Course (ARCH3314); Form Z, 3D-Max, Rhino. Basic skill to use Adobe Suits (Illustrator & Photoshop) will also be required.

"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\ARCH_3501_F08_TSUBAKI

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	8/25	Studio Introduction	FIRST DAY OF CLASSES
2	8/27	Phase I	
3	8/29		
Week 2			
	9/1		LABOR DAY
4	9/3		
5	9/5		
Week 3			
5	9/8	3rd year Instructor's Meeting 2:30-3:30PM	
6	9/10		LAST DAY: For student-initiated drop on the Web
7	9/12		
Week 4			
8	9/15		
9	9/17		
10	9/19		
Week 5			
11	9/22	Phase I Review	
12	9/24	Phase II	
13	9/26		
Week 6			
14	9/29		
15	10/1		
16	10/3	Field Trip to Dallas / Ft. Worth	
	10/4	Field Trip to Dallas / Ft. Worth	
Week 7			
17	10/6	3rd year Instructor's Meeting 2:30-3:30PM	
18	10/8		
19	10/10		
Week 8			
20	10/13		
21	10/15		
22	10/17		
Week 9			
23	10/20		MID-SEMESTER GRADES DUE
24	10/22		
25	10/24	Phase II Midterm Review	
Week 10			
26	10/27		Final Day to Drop a Course
27	10/29		
28	10/31		
Week 11			
29	11/3	3rd year Instructor's Meeting 2:30-3:30PM	
30	11/5		
31	11/7		
Week 12			
32	11/10		

33	11/12		
34	11/14		
Week 13			
35	11/17		
36	11/19		
37	11/21		
Week 14			
38	11/24	Phase II Project Due 5:00PM	
	11/25		LAST DAY: To withdraw from the University
	11/26		THANKSGIVING HOLIDAY
	11/28		THANKSGIVING HOLIDAY
Week 15			
39	12/1		
40	12/2	Phase II Final Review	
	12/3		LAST DAY OF CLASSES
	12/5		Web for Faculty available for grading
41	12/6	Class will meet during FINAL EXAM (1:30PM-4:00PM)	
Week 16			
	12/10		FALL SEMESTER ENDS
	12/11		GRADES DUE: For Graduating students
Week 17			
	12/15		FINAL GRADES DUE