

DSGN3100: Architecture Design Studio

Poetics of Material Assembly

Instructors: Desmarais, Goodwin, Jones, Merlin (3rd Year UG) + Tsubaki (2nd Year GR, Coordinator)



Olivetti Showroom / Scarpa Photo: Tsubaki ©

Introduction:

"And you can make the same conversation with concrete. And you can make the same conversation with paper, or with papier-mache, or with plastic, or with marble, or any material that has its nature. And it's the beauty of what you create that you honor - the material for what it really is. And never say that you use it in a kind of subsidiary way which makes the material itself wonder when the next man will come who will honor its character, you see."

Louis Kahn, "Lecture at Pratt Institute, 1973"

poetic [pō'etik] adjective.

of, relating to, or used in poetry: *the muse is a poetic convention.*

- written in verse rather than prose: *a poetic drama.*
- having an imaginative or sensitively emotional style of expression: *the orchestral playing was colorful and poetic.*

Architecture aims to evoke emotional and intellectual response from the phenomenal qualities of physical constructs. It requires the masterful use of materials and meticulously crafted details beyond the basic human needs for shelter. The pedagogical intention of this studio is to develop an innate understanding of relationships between the materiality and details through the physical exploration of specific materials and their expressive potential as assemblies.

The course employs two distinct modes of investigations, empirical and theoretical. The empirical focuses on *making*, exploring a specific material and assembly method through trial and error. The process is methodically documented and the artifact qualitatively analyzed through various

representational means. The theoretical focuses on the speculative investigations of significant building precedents and their material assemblage explored through various representational means.

Both methodologies are discreet yet, explicitly treated as an exploration on how to mediate the ***in-between spatial condition*** as an architectural resolution. It is intended to instill new skills and foster the kernel of ideas along the way, seamlessly integrating into the semester long design project.

The studio roughly breaks down into three phases, each intended to introduce specific architectural issues.

i. Preliminary Design Phase (6 wks):

- Zoning / Site Analysis and Parking
- Programing Analysis and Adjustments
- Circulation / Egress / ADA

ii. Design Development Phase (6 wks):

- Structure - Stereotomic / Tectonic relationships
- Material Assembly and Detailing

iii. Final Presentation Phase (3 wks):

- Materiality Representation and Craft

The studio entrusts the individual student to build and synthesize the previously introduced architectural issues to achieve the educational goal set forth in the course.

The studio relies on both, traditional forms of representation and fabrication methods as well as digital modeling and fabrication. Solid working knowledge of Rhino, Form-Z or an equivalent digital modeling tool along with AutoCad is required. Basic skills on Adobe Suite (Illustrator & Photoshop) will also be a prerequisite.

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

Course Information:

Name: Architecture Studio

Number: DSGN3100

Narrative: The charge of third year fall semester is to carry forward the focused lessons and themes from the second year and to prepare students for the comprehensive integration in the following spring. The studio focus on the material reality of buildings. It emphasizes how material selections and material assemblage/detailing are paramount in manifesting the architect's design concepts and the experiential presence of the building.

Prerequisite: DSGN2200

Credits: (6) semester credit hours

Meeting Place: RMEM 402(UG)/301(GR)

Meeting Time: MWF 01:00-05:00 PM

Instructor Information:

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RMEM120

Featured NAAB Student Performance Criteria (2009) :

A.5. Investigative Skills: Ability to gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.

***B.1 Pre-Design:** Ability to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and

equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment Criteria. (*B.1 Pre-Design SPC is applicable only to M.Arch I Program)

B. 2. Accessibility: Ability to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.

B. 12. Building Materials and Assemblies: Understanding of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.

Expected Learning Outcomes:

Student will be able to:

- make intelligent building material choices consistent with the appropriate design intent.
- articulate and detail the material assemblies in an appropriate scale consistent with the appropriate design intent.
- make site selections and intelligent program assessment based on the client needs and relevant contextual information.

The result will be documented and demonstrated in physical mock-ups, representational drawings and models, process studies; verbal presentations at formal reviews.

Computer:

Students are required to provide and maintain their own laptop computers for use during the class. See the college website for minimum specifications. Technical difficulties, viruses, crashes, server and print bureau problems, or corrupted files will not be accepted as legitimate excuses. **ALL WORK SHOULD BE CONTINUOUSLY SAVED AND REGULARLY BACKED UP.**

Equipments / Software / Materials:

Digital Camera w/ minimum of (5) mega-pixel resolution.

2D drafting 3D modeling software: AutoCad, Rhino.

2D graphics software: Adobe Creative Suite (Photoshop, Illustrator, Acrobat, etc.)

Rolls of white or yellow trace.

Basic model-making materials and tools as needed.

Digital Portfolio:

Students are required to maintain a **meticulous record** of the design process via digital format. Digital files of the process materials (scanned sketches, photos of iterative sketch models etc.) and the final products (presentation drawings, physical and digital models) must be submitted according to

specified formats at designated times throughout the semester. Files must be uploaded to the designated course folder on the TSA public server; <ftp.arch.tulane.edu>.

Readings and Articles:

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

Environmental Responsibility:

Aerosol paints, spray glues or fixatives, etc. must not be used inside the building. Violators will **FAIL** the course.

Studio Culture:

The Tulane School of Architecture fully supports the studio-based model as central to the curriculum for architectural education and relies on the studio to provide and promote a healthy environment for creative and engaged learning. The design studio is an open environment for the fostering of creativity and engagement in the design process, promoting exploration, innovation and intellectual advancement, and supporting a culture of critical inquiry, collaboration, community engagement, and stewardship among students, faculty and administration. For further details, refer to the Tulane School of Architecture *Notes on Studio Culture Policy and Process* at:

<http://architecture.tulane.edu/current-students/student-information>

General Expectations:

Students are expected to work regularly and productively in fulfillment of the assignments. In order to receive effective criticisms, students are expected to come to the studio with **committed** analog/digital exploration and/or physical construct representing a completed thought. Superficial changes to a project or merely verbal descriptions of an idea **will not be critiqued**. All work should be the product of the individual, unless teamwork are required.

Students must work in the studio space during scheduled hours and plan to discuss the progress of their work with the instructor regularly (minimum of once per week). Students planning to work in the computer lab must notify the instructor and arrange with another student to notify them when impromptu studio meetings occur.

During group pinups, individuals are expected to carefully listen and absorb critiques towards others and apply what's relevant to their own. Not all projects will be addressed. Only new works, serious and significant, that contributes to the general progress of the studio. Students are also expected to integrate knowledge and skills acquired in previous courses.

The schedule will be day to day, based on the progress of the class as a whole. Expect to spend a significant amount of

time working on your project outside of the scheduled course hours. The contact time is (12) hours per week. The expected work hours outside of the class is an average of 3 times contact time or (36) hours per week. It is strongly suggested that you get into the habit of working in the studio after hours. Experience has shown that students who work in studio after class hours on a regular basis have a greater degree of success in the course because they can discuss, clarify, and exchange ideas and methods with colleagues.

Attendance Policy:

Students are responsible for attending class. All absences must be reported to the course instructor; the only excused absences are those for reasons of health or crisis. Unexcused absences could reduce a student's course grade, as will as late arrivals or early departures from class. Three consecutive absences or four nonconsecutive absences will, in normal circumstances, mean that the instructor may give a WF grade to the student. For further details, refer to the academic policies on Tulane School of Architecture website at:

<http://architecture.tulane.edu/students/academic-policies>

Incomplete and Late Work:

In accordance with School policy, work that is not adequately represented will not be discussed in reviews. Late work will only be accepted with the permission of the instructor. Work submitted after the final day of classes is not acceptable without written permission from the Dean. Any late work accepted will be penalized 10% for the first day of lateness, and 5% per day thereafter. (The first day of lateness begins immediately after the deadline, and include weekends). Extensions for medical or family emergencies should be requested immediately after the event and in advance of the deadline, and must be supported by adequate documentation.

Academic Integrity:

Tulane University values student self-governance and the development of a strong ethical foundation. The Honor Code is a central element of the University's identity. All academic work must be the result of the student's own efforts, except when collaboration has been explicitly allowed. Any student behavior that has the effect of interfering with education, pursuit of knowledge, or fair evaluation of a student's performance is considered a violation and will be prosecuted through the procedure outlined in the Honor Code. For further details, refer to the Honor Code on the Tulane University website at: <http://www.tulane.edu/~jruscher/dept/Honor.Code.html>

Civility in the Classroom:

All individuals and/or groups of the Tulane University community are expected to speak and act with scrupulous respect for the human dignity of others, both within the class-

room and outside it, in social and recreational as well as academic activities. By accepting admission to Tulane University, a student accepts its regulations and acknowledges the right of the University to take disciplinary action, including suspension or expulsion, for conduct judged unsatisfactory or disruptive. For further information, refer to the code of student conduct on Tulane University website at: <http://studentconduct.tulane.edu/>

ADA Statement:

It is the policy and practice of Tulane University to comply with the Americans with Disabilities Act (Pub. L. No. 101-336), Section 504 of the Rehabilitation Act of 1973 (Pub. L. No. 93-112, § 504, as amended), and state and local requirements regarding individuals with disabilities. Students who seek accommodation are responsible for registering their disabilities with the Office of Disability Services (ODS) at the Center for Educational Resources and Counseling, requesting the specific accommodations they may need and providing adequate documentation that substantiates their disabilities and shows the need for the requested accommodations. For further details, refer to the Overview of Accommodations Procedures for Students with Disabilities on the Tulane University website at:

<http://www.tulane.edu/~erc/disability/AccOverview.htm>

Grading Distribution and Evaluation:

Preliminary Design Phase:	40%
Design Development Phase:	40%
Final Presentation:	10%
Digital Folio:	10%

Evaluation of student performance is based upon daily studio process as well as the product. Improvements and growth are the keys. The instructor will conduct his/her expert assessment on student performance following each major stage of the semester. Note that this is not a mathematically quantifiable assessment. It is based on the 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 of due dates. Late or incomplete work will result in a substantial reduction of the semester grade defined as follows:

A (excellent) exceptional performance; 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.



Zuiho-in (Daitokuji) / downspout detail Photo: Tsubaki ©

ATCS3100 FA13 Course Calendar (subject to change/adjustment Rev. 10.07.13)

Meeting	Date	Agenda	TSA Events
Week 1			
1	08.26	Project Introduction (RM201) 1-3PM Preliminary Design Phase	Classes begin
2	08.28		
3	08.30	Design Philosophy Lecture (Prof. B. Goodwin)	
Week 2			
	09.02		Labor Day Holiday
4	09.04		
5	09.06		
Week 3			
6	09.09		
7	09.11		
8	09.13		
Week 4			
9	09.16		
10	09.18	New Orleans Building Arts/Crafts Lecture (Prof. J. Stubbs)	
11	09.20		
Week 5			
12	09.23		
13	09.25		
14	09.27		
Week 6			
15	09.30		
16	10.02	Preliminary Design Phase Group Review I	
17	10.04	Preliminary Design Phase Group Review II	
Week 7			
18	10.07	Design Development Phase Tectonic / Stereotomic Lecture (Prof. S. Bernhard) Materials and Assembly Methods - Supplementary Exercises Introduction	
19	10.09		
	10.11	No Class	Fall Break
Week 8			
20	10.14	Organized Group Critiques (Favrot Lobby / RM201)	
21	10.16		
22	10.18		
Week 9			
23	10.21		
24	10.23		
25	10.25		
Week 10			
26	10.28		
27	10.30	Materials and Assembly Methods - Supplementary Exercises Review (Favrot Lobby, 4F Lobby, 404, 405)	
28	11.01		
Week 11			
29	11.04		
30	11.06		
31	11.08		
Week 12			
32	11.11		
33	11.13		
34	11.15		
Week 13			
35	11.18		
36	11.20	Design Development Phase Individual Mock Review (Favrot Lobby, 4F Lobby, 404, 405)	
37	11.22		
Week 14			
38	11.25		
	11.27	No Class	Thanksgiving Holiday
	11.29	No Class	Thanksgiving Holiday
Week 15			
39	12.02	DOL Laser Cut Deadline at 6:00PM for DSGN3100	
40	12.04	DOL Plot Deadline at Noon for DSGN3100	
41	12.06	Final Review	Last day of class
Week 16			
42	12.09	Last Class Meeting (course evaluation etc.)	Exam Period begin
	12.12	Studio Walkthrough	
	12.13	Studio Cleanup / Move Out	
Week 17			
	12.17	Digital Portfolio Due for Grading	Last day of Exam Period