

3502: Architectural Design Studio IV

Integration Studio

Studio Instructor:

Kentaro Tsubaki, R.A., Assistant Professor

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Office Hours: Tues/Thur 11:00AM-12:30PM
(other times by appointment only)

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Course Website:

<http://web.mac.com/ktsubakix/iWeb/KT%20Studio%20KT/+Courses.html>

Course Description:

Course name and number: 3502 Architectural Design
Tonality: Integration. Studio reinforces the integration of structural, environmental control, building envelope, and building service systems into the design of the building.

Studio IV (5:2:8)

Prerequisite: 3501 Architectural Design Studio III

Credits: 5 semester credit hours

Meeting Place: Room 711, Architecture Building

Meeting Time: MWF 01:00-04:20 PM

Course Introduction:

ARCH 3502 examines the underlying strategies, tactics and techniques of integration. Emphasis is placed on developing a systematic approach to architectural design while simultaneously dealing with the development of design theory and intellectual inquiry. Proficiency in architectural design is acquired through focused iteration. The studio integrates building systems and codes with previously introduced architectural design issues: formal ordering systems (space, form, light, scale, proportion), precedents/case studies, development of research, writing, and graphic/technical documentation skills, site, context, environmental conservation, and accessibility, building program, structural order, materials/assemblies and development of design details

Project Introduction/Goals:

Architecture as a discipline, aims to evoke emotional and intellectual response through phenomenal qualities (materiality/texture, light/shades, time/sequence, scale/proportion and spatial/structural order) beyond the basic human needs for shelter. The pedagogical intention of the studio is to acknowledge the divide between phenomenal qualities of physical objects and representational methods employed in the design process. The studio intend to exploit the difference as a possible source for architectural exploration.

We will begin the investigation with a notion of “Eccentric Extension” as a vehicle to speculate tectonic possibilities of “Repetitive Structural Units” and proceed to engage in material/textural exploration through production of full scale units. Program and design of a small Prof. Tsubaki, K

scale structure will be derived from observation, recordings and analysis of the phenomenal qualities possessed by in-situ assemblage of the units and will be developed through careful comparison between the physical and the representational.

Students will be introduced to the “making” of architectural construct, learn to cultivate an acute sensibility to the phenomenal quality of physical objects and incorporate those responses into the design process. Students will also acquire skills to interpret and communicate these “ephemeral” qualities through various mode of representation, drawings in particular.

Studio Outline:

Phase I (3 weeks)

Theory and experimentation of Repetitive Structural Units (R.S.U.) with Eccentric Extension (E.E.)

Phase II (2 weeks)

Production and Assemblage of R.S.U. w/ E.E.

Phase III (2 weeks)

Observation and Recording of R.S.U. w/ E.E.

Phase IV (8 weeks)

Program and Design of Architectural Structure based on R.S.U. w/ E.E.

Expected Learning Outcomes:

Projects consisting of physical mock-up, representational drawings and models, process studies; verbal presentations at formal reviews.

Featured NAAB Student Performance Criteria for this course:

3.13.1 Speaking and Writing Skills. Ability to read, write, listen, and speak effectively.

3.13.3 Graphic Skills. Ability to use appropriate representational media, including freehand drawing and computer technology, to convey essential formal elements at each stage of the programming and design process.

3.13.21 Building Envelope Systems. Understanding of the basic principles and appropriate application and performance of building envelope materials and assemblies

3.13.23 Building Systems Integration. Ability to assess, select, and conceptually integrate structural systems, building envelope systems, environmental systems, life-safety systems, and building service systems into building design.

3.13.20 Life Safety. Understanding of the basic principles of life-safety systems with an emphasis on egress

3.13.24. Building Materials and Assemblies. Understanding of the basic principles and appropriate application and performance of construction materials, products, components, and assemblies, including their environmental impact and reuse

3.13.26 Technical Documentation. Ability to make technically precise drawings and write outline specifications for a proposed design.

3.13.33 Legal Responsibilities. Understanding of the architect's responsibility as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, historic preservation laws, and accessibility laws.

General Methods: Arch 3502 is a design studio course that requires a substantial dedication and investment of student time, skill, and critical thought both during and after official studio hours. Students are required to participate in all studio activities including critiques, lectures, discussions, and field trips. Production and hard work are expected. Extensive use of the Shop Facilities will be required for fabrication of full scale architectural mock-ups. Studio usually begins with a group pinup followed by the assignment, lectures, presentations, demonstrations, discussions, or individual critiques of project work as needed.

The studio promotes integration of analog (physical) design and fabrication techniques with currently available digital technologies. Digital media studies must be printed prior to studio time and displayed for daily pinups and formal reviews. Students are expected to have committed analog or digital representations and/or actual physical construct of a completed thought for each studio day to receive effective criticism. Mere verbal descriptions will not be critiqued. Repeated works or works with superficial changes that do not move the project forward will be ignored.

During group pinups, individuals are expected to understand and apply criticisms of other students' work relevant to their own work. Many times during a pinup it will not be necessary to talk about every project. Only serious and significant new work that contributes and moves forward the general progress of the studio will be discussed. Have all of your previously completed prints and models available in studio, for all studio periods, because we will need to refer to these works from time to time.

The schedule will be day to day, based on the progress of the class as a whole. Research components are conducted simultaneously with design development. Expect to spend a significant amount of time working on your studio project outside of class time. In class contact time is 10 hours per week. The outside of class work time expected is an average of 3 times contact time or 30 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

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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.

Required Computer: Students are required to provide and maintain their own computers for use during studio. 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.

Required Printer: Laser or ink-jet printer at your desk in studio.

Required Camera: Digital Camera w/ minimum of (2MG) pixel resolution.

Required Software: auto•des•sys form•Z and Adobe Creative Suite (Photoshop, Illustrator, Acrobat, etc.), AutoCad, Sketch-Up.

Required at your desk: Despite the fact that you are using computers and printers extensively, each student must have the following readily available: Architect's Scale, Engineering Scale, rolls of white or yellow trace along with the materials mentioned above.

Required Materials: For this studio you will need to purchase several drawing and model-making tools, and additional consumables as the course progresses and assignments are made. Materials include: pens, pencils, paint, gesso, vellum, tracing paper, bond paper, acetate, acrylic sheet, plastic, fabric, metal, basswood, mdf, plywood, blue or pink foam, foam-core, paper, cardboard, chipboard, museum board, hydracal, etc.; healable cutting boards, metal straight edges, triangles, x-acto knives, etc. Extensive use of scanning, color ink jet and laser printing.

Required Analog Journal: Students must keep a journal of studio thoughts and ideas (sketches, drawings, notes, articles, photos, xeroxes). The journal is crucial to reflective thinking and a vital record of key concepts and explorations considered in your project. Have your journal available in class everyday.

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

Environmental Responsibility: Aerosol paints, spray glues, super-glues, or fixatives, etc. must not be used. Violators will **FAIL** the course.

Required Readings and Articles: Will be assigned throughout the semester.

Attendance Policy: Students are responsible for attending class. Four absences are considered excessive and constitute cause for having the student drop the class or receive a grade of “F”. Whether an absence is excused or unexcused is determined solely by the instructor with the exception of absences due to religious observance and officially approved trips according to guidelines specified in the TTU catalog. Students are expected to comply with TTU rules for reporting student illness requiring absence from class for more than one week, or immediate family deaths. Students are required to work in studio during studio hours. Work in studio requires students to have their computer, printer, drawing tools, materials, and supplies available for class at all times. Work includes participation in pinups, lectures, and discussions. Failure to work in class with undivided attention, any tardiness, leaving early, lack of participation, general socializing, goofing around, disruptive behavior, etc. will count as absences. You are not allowed to work on assignments from other classes during this class.

Academic Integrity: It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and a high standard of integrity. The attempt of students to present as their own any work that they have not honestly performed is regarded by the faculty and administration as a serious offense and renders the offenders liable to serious consequences, possibly suspension.

Civility in the Classroom: Students are expected to assist in maintaining a classroom environment (during or after hours within the studio environment) that is conducive to learning. In order to assure that all students have the opportunity to gain from time spent in class, unless otherwise approved by the instructor, students are prohibited from engaging in any other form of distraction. Inappropriate behavior in the classroom shall result, minimally, in a request to leave class. More information on this topic is available online at: www.studentaffairs.ttu.edu/vpsa/publications/civility.htm

ADA Statement: Any student who because of a disability may require special arrangements in order to meet course requirements should contact the instructor as soon as possible to make any necessary accommodations. Students should present appropriate verification from Student Disability Services during the instructor's office hours. Please note instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, you may contact the Student Disability Services office at 335 West Hall or 806-742-2405.

Academic Regulations: Please consult the Texas Tech University 2006-07 Catalog, (pp. 47-51) for information about Dropping a Course, Class Attendance, Reporting

Illness, Absence Due to Religious Observance, Absence due to officially approved trips, Academic Integrity, Civility in the Classroom, and Grading Practices. Equal Opportunity statement is on p. 4.

Architecture Building: Students must comply with ALL requirements of the Architecture Building Policy posted on the college web site at: www.arch.ttu.edu/Architecture/

Student Work: The College of Architecture reserves the right to retain, exhibit, and reproduce work submitted by students. Work submitted for grade is the property of the college and remains as such until it is returned to the student.

Grading/Evaluation: Evaluation of student performance in Arch 3502 is based upon daily studio process as well as product. Improvement and growth are the keys. There is no final exam. 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 completed 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.

KT Studio Calendar (subject to change/adjustment)

Meeting	Date	Agenda	CoA Events
Week 1			
1	01/10	Studio Introduction/Lottery Phase I	First Day of Classes
2	01/12		
Week 2			
3	01/15	No Meeting	University Holiday: Martin Luther King Jr. Day
4	01/17		
5	01/19		
Week 3			
6	01/22		
7	01/24		
8	01/26		Last day to drop a course and receive a refund
Week 4			
9	01/29		
10	01/31		
11	02/02	Conclusion of Phase I	
Week 5			
12	02/05	Phase II	
13	02/07		
14	02/09		
Week 6			
15	02/12		
16	02/14		
17	02/16	Conclusion of Phase II	
Week 7			
18	02/19	Phase III	
19	02/21		
20	02/23		
Week 8			
21	02/26		
22	02/28		
23	03/02	Conclusion of Phase III	
Week 9			
24	03/05	Mid Term Review	
25	03/07	Documentation of Completed Work / Individual Student - Instructor Meeting	5 p.m., mid-semester review due via Web for Faculty
26	03/09	Documentation of Completed Work / Individual Student - Instructor Meeting	
Week 10			
30	03/12	No Meeting	Spring Break
31	03/14	No Meeting	Spring Break
32	03/16	No Meeting	Spring Break
Week 11			
33	03/19	Phase IV	
34	03/21		
35	03/23		
Week 12			

	36	03/26		
	37	03/28		
	38	03/30		
Week 13				
	39	04/02		
	40	04/04		
	41	04/06		
Week 14				
	42	04/09		
	43	04/11		
	44	04/13		
Week 15				
	42	04/16	No Meeting	
	43	04/18		
	44	04/20		
Week 16				
	45	04/23		
	46	04/25		
	47	04/27	Conclusion of Phase IV	
Week 17				
	48	04/30	Final Review	
		05/01		Last Day of Classes
		05/08	1:30-4:00 PM Final Exam Time Individual Student - Instructor Meeting	Spring Semester Ends
		05/14		3 p.m., final grades due via Web for Faculty