Texas Tech University: College of Architecture Spring 2021





Plan of Richards Medical Research Laboratories, Louis Kahn Architect, Philadelphia, 1960

"The plan is the generator. Without a plan you have lack or order, and willfulness." Corbusier, L. (1960). Towards a New Architecture (Uers Une Architecture, 1923) (F. Etchells, Trans.). Praeger Publishers Ltd.

1 COVID HEADER

This class is categorized as ONLINE and SYNCHRONOUS. This means that we will meet via 'ZOOM' at the day and time specified above. The Instructor will email a link that will allow you to join the zoom meeting.

IMPORTANT: All students will need to have a good computer with a stable and fast internet access, a microphone, a web-camera, and a set of headphones.

Please find a quiet place for the class. Your camera should be turned on and microphones muted unless you want to ask a question.

2 CATALOGUE DESCRIPTION

Contemporary issues in architectural theory and history utilizing precedents from early 20th century to present. May be repeated for credit. (CL)

3 COURSE DESCRIPTION

Regardless of what buildings look like, we experience them diachronically as we walk through them. This two-dimensional human experience is orchestrated by the design of the 'plan'. It is also the most enduring. Once developed, approved, and constructed, it is relatively hard to change. Unfortunately, this essential element of architecture is often unappreciated in the design phase. Le Corbusier called this 'the generator'.

This seminar is dedicated to exploring 'plans'. Collectively we will investigate what are plans, what factors influence them, how they orchestrate human experience, express architectural philosophy, embed social logic, and how the visible three-dimensional form is built upon them.

4 PREREQUISITE

- 1. A good knowledge of historical and contemporary architecture.
- 2. An inquisitive mind.
- 3. Willingness to think critically and work hard.
- 4. Digital drawing skills

5 STUDENT LEARNING OBJECTIVES

Detailed understanding of plan as the formative basis of architectural design Ability of modelling configuration and accessibility patterns Understand investigative techniques of layout morphology. Graphical presentation of data

6 GRADE DISTRIBUTION

Tba

7 EVALUATION CRITERIA

Tba

8 GRADING POLICY

Grade A: <u>Superior work</u>. Exceptional performance strongly exceeding requirements of assignments; initiative proving independent resourcefulness; strong positive attitude toward the work; a growing level of improvement.

Grade B: <u>Good, above average</u>. Adequate performance above the norm, accurate and complete, beyond requirements of assignments: good initiative; positive attitude toward the work; improvement showing marks of progress.

Grade C: Average. Mediocre or conservative performance, satisfying all requirements of assignments with a neutral and ordinary level of initiative, attitude, and performance.

Grade D: <u>Not Acceptable</u>. Performance not meeting the passing standards of the course. Initiative unacceptable. Work below standard.

Grade F: <u>*Failing*</u>. Ineffective performance not satisfying the requirements of the assignments to an extreme degree. Level of initiative, attitude, and improvement non-existent.

A student who has shown clear and successful improvement throughout the semester may be given the advantage in final grade.

For the purpose of calculating a final grade the following numbering system will be used: A+ = 97-100, A= 93-96, A- =90-92, B+ = 87-89, B = 83-86, B- = 80-82, C+ = 77-79, C = 73-76, C- = 70-72, D+ = 67-69, D = 63-66, D-=60-62. F=below 60

9 SCHEDULE

	Tuesday, January 19, 2021	FACULTY ON DUTY	
	Wednesday, January 20,		
	2021	CLASSES BEGIN	
		Introduction to Class.	
1	Thursday, January 21, 2021	Requirements. Assignments	
2	Tuesday, January 26, 2021	WHAT IS A PLAN?	
3	Thursday, January 28, 2021	PLAN TYPES	
4	Tuesday, February 2, 2021	SPATIAL INTERPRETATION	
5	Thursday, February 4, 2021	RENAISSANCE PLAN	
6	Tuesday, February 9, 2021	MIDERN PLAN	
7	Thursday, February 11, 2021	FORMATIVE IDEAS IN PLANS	
8	Tuesday, February 16, 2021	ТВА	
9	Thursday, February 18, 2021	PRELIMINARY PRESENTATIONS	
10	Tuesday, February 23, 2021	PRELIMINARY PRESENTATIONS	
11	Thursday, February 25, 2021	PRELIMINARY PRESENTATIONS	
12	Tuesday, March 2, 2021	PRELIMINARY PRESENTATIONS	

13	Thursday, March 4, 2021	PRELIMINARY PRESENTATIONS	
14	Tuesday, March 9, 2021	INDIVIDUAL STUDY	
15	Thursday, March 11, 2021	DEPTHMAP TUTORIAL	
16	Tuesday, March 16, 2021	TOPOLOGICAL ANALYSIS	
17	Thursday, March 18, 2021	TOPOLOGICAL ANALYSIS	
	Friday, March 19, 2021	SPRING VACATION	
18	Tuesday, March 23, 2021	CASE STUDY	
19	Thursday, March 25, 2021	CASE STUDY	
20	Tuesday, March 30, 2021	CASE STUDY	
21	Thursday, April 1, 2021	CASE STUDY	
22	Tuesday, April 6, 2021	CASE STUDY	
23	Thursday, April 8, 2021	CASE STUDY	
24	Tuesday, April 13, 2021	STUDENT PRESENTATIONS	
25	Thursday, April 15, 2021	STUDENT PRESENTATIONS	
26	Tuesday, April 20, 2021	STUDENT PRESENTATIONS	
27	Thursday, April 22, 2021	STUDENT PRESENTATIONS	
28	Tuesday, April 27, 2021	STUDENT PRESENTATIONS	
29	Thursday, April 29, 2021	Work on Project	
30	Tuesday, May 4, 2021	Work on Project	NO EXAMS. LAST DAY OF CLASS
	Wednesday, May 5, 2021	DEAD DAY	
	5/6/2021-5/11/2021		FINAL EXAM PERIOD
			GRADES FOR GRADUATING
	Wednesday, May 12, 2021		STUDENTS DUE
	Monday, May 17, 2021		FINAL GRADES DUE

10 PROJECT DESCRIPTION

Select TWO buildings from the list in section 10.2. You job is to study the plan from different points of view as discussed in class and produce a set of drawings and bulleted text to express them. Compose and submit in 8 ½ by 11 sheets of paper (as many needed)

Study and understand this project as much as you can. Find more information about the building from many sources. Try to find (other) drawings, photographs, descriptions, evaluations etc. Find the street address and use google maps to virtually 'visit' the project.

- 1. Draw the plan in digital (vector) format (AutoCAD, Rhino etc.). Make sure that the scale is set correctly. If there are more than one floor, then put them in different layers, but on top of each other.
 - a. Create an 'inverse' of this plan.
- 2. Diagram the site-project relationship.
- 3. Find the entrance? What are typical walking paths inside the house?
 - a. Graphically show how one enters and walks through the house. Pick two scenarios. You decide what might be the best graphic to show this information.
- 2. Areas and relationships.
 - a. Total Area
 - b. Distribution of areas into different categories. (Total areas and proportions)
 - i. Public-Private
 - ii. Served Servant
 - iii. Day light-non daylight
- 3. Put furniture. Do minor changes in the plan provide greater advantages?
- 4. What might be the organizing principle?
 - a. Numerical relations?
 - b. Geometric relations?
 - c. Site relations?
 - d. Etc.
 - i. Is there a 'layout concept'? Please draw an overlay that expresses it. Layout concepts could be geometrical or proportional. (anything else?)
- 5. Configurational Analysis
 - a. J-Maps
 - i. From exterior
 - ii. From main bedroom
 - 1. What do they mean in terms of occupying this house?
 - b. Configuration Analysis of rooms as Spaces
 - i. Depth values of each room
 - ii. Where is the center?? (i.e., which room has the least mean depth?)
 - iii. Depth values for each room.
 - 1. What do they mean in terms of occupying this house?
- 6. Visibility Analysis
 - a. Isovists from middle of each room
 - i. Which is the biggest isovist? Compare in area and length.
 - ii. Pattern of visibility integration (VGA)
 - b. Configuration of rooms as lines (connect different floors if available)
- 7. Plan as Aesthetics

a. Think of the plan (and the site) as a compositional element. Your job is to create a 'beautiful' graphic that is worthy of being framed and displayed in a museum. Be creative, use lines, colors, layers etc.

10.1 Software: DEPTHMAP

For configuration and visibility analysis you will need to download Depthmap-X (version 0.8.0)Download linkhttps://github.com/SpaceGroupUCL/depthmapX/releasesDownload the appropriate version from the bottom of the page.

Please consult the book 'Space Syntax Methodology'. Access the book from the bibliography section of this syllabus.

Note: Make sure that the drawing is done to a proper scale.

Convex map analysis: pp. 16-21 Isovist and VGA Analysis: pp. 29-38

	YEAR	NAME	ARCHITECT	PAGE #	SOURCE
1	2000	Father's House	Ma Qingvun	232	Key Houses of the
				_	Twentieth Century
2	1980	Casa Rotunda	Mario Botta	182	Key Houses of the
				_	Twentieth Century
3	2000	Aluminum House	Tovo Ito	228	Key Houses of the
			,		Twentieth Century
4	1998	Mobius House	Ben van Berkel and	226	Key Houses of the
			Caroline Bos		Twentieth Century
5	1994	Marika Alderton House	Glenn Murcutt	214	Key Houses of the
					Twentieth Century
6	1989	House at Koramangala	Charles Correa	196	Key Houses of the
					Twentieth Century
7	1984	Roof Roof House	Ken Yeang	186	Key Houses of the
					Twentieth Century
8	1984	House at Santender	Junquera and Oita	184	Key Houses of the
					Twentieth Century
9	1977	Glass Block Well	Tadao Ando	178	Key Houses of the
		Horiuchi House			Twentieth Century
10	1973	Douglass House	Richard Meier	162	Key Houses of the
					Twentieth Century
11	1974	Dickes House	Rob Krier	164	Key Houses of the
					Twentieth Century
12	1973	Fisher House	Louis Kahn	158	Key Houses of the
					Twentieth Century
13	1967	Hanselmann House	Michael Graves	146	Key Houses of the
					Twentieth Century
					and
					Five Architects

10.2 Building List (link to drawings here)

14	1966	Creek Vean House	Foster and Rogers	144	Key Houses of the
					Twentieth Century
15	1962	Vanna Venturi House	Robert Venturi	142	Key Houses of the
					Twentieth Century
16	1956	Villa Shodan	Le Corbusier	130	Key Houses of the
					Twentieth Century
17	1949	Eames House	Charles and Ray Eames	106	Key Houses of the
					Twentieth Century
					and
					Key Houses in the
					20 th Century
18	1936	Jacobs House	Frank Lloyd Wright	90	Key Houses of the
					Twentieth Century
					And
					Key Buildings of the
					20 th Century pp. 80
19	1930	Tugendhat House	Mier Van Der Rohe	78	Key Houses of the
					Twentieth Century
20	1925	Villa La Roche	Le Corbusier	46	Key Houses of the
					Twentieth Century
					and
					Key Buildings of the
					20 th Century pp 62
21	1926	Lovell Beach House	Rudolph Schindler	50	Key Buildings of the
					20 th Century
22		Villa Stein de Monzie	Le Corbusier	54	Key Houses of the
					Twentieth Century
23	2004	Poli House	Pezo Von Ellrichshausen	20	Key Contemporary
			Architects		Buildings
24	2005	Element House	Simi Rintala	26	Key Contemporary
					Buildings
25	2006	Social Housing	Edouard Francois	67	Key Contemporary
					Buildings
26	2001	Sound Wall Homes	SAP s+a+1	хххх	Key Contemporary
					Buildings
27	1999	Valley Center House	Daly, Genic Architects	154	Key Contemporary
					Buildings
28	1927	Lovel House	Richard Neutra	54	Key Buildings of the
					20 th Century
29	1928	Tugendhat House	Mies Van Der Rohe	60	Key Buildings of the
					20 th Century
30	1973	House at Riva San Vitale	Mario Botta	170	Key Buildings of the
					20 th Century
31	1984	Koshino House	Tadao Ando	186	Key Buildings of the
					20 th Century
	1966	The Ryde	Phippen Randall and	133	Key Urban Housing
			Parkes		of the 20 th Century

1938 Habitat	1938 Habitat			
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11 BIBLIOGRAPHY

11.1 Books

- Al-Sayed, K., Turner, A., Hillier, B., Iida, S., & Penn, A. (2014). *Space Syntax Methodology* (4th ed.). Bartlett School of Architecture, UCL. (Read pp. 15-38)
- Clark, R. H., & Pause, M. (2005). *Precedents in Architecture*. John Wiley and Sons Inc.
- Davies, C. (2006). Key Houses of the Twentieth Century Plans, Sections and Elevations. New York, London: WW Norton and Company.
- Eisenman, G., Gwathmey, Hejduk and Meier. (1975). *Five Architects*. New York: Oxford University Press.
- Gregory, R. (2008). *Key Contemporary Buildings Plans, Sections and Elevations*. New York and London: WW Norton and Company.
- Weston, R. (2004). Key Buildings of the Twentieth Century, Plans, Sections and Elevations. New York, London: WW Norton and Company.

11.2 Journal Articles

• Fletcher, R. (2019). Geometric Proportions in Measured Plans of the Pantheon of Rome. *Nexus Network Journal Architecture and Mathematics* (21), 329-345.

ADMINISTRATIVE

12 ELECTRONIC MAIL

All students should update their official TTU email accounts and check it every day. Announcements and other information will be sent to this email address. *This will be considered 'official' notification*.

13 ATTENDANCE POLICY

The College of Architecture at Texas Tech University takes the professional preparation of its students as future architects very seriously. Architectural professionals understand the importance of being present, on time, with work completed. Adherence to these professional attributes begins in architectural education. Thus, attendance is mandatory. For a graduate course, "attendance" means more than showing up to class. It means coming to class having read the materials or done the assigned tasks. It also means having assignments submitted when it is due. Please remember that each class builds on the previous one and being absent in class will seriously hinder comprehension of the materials.

A maximum of two absences will be excused. For each unexcused absence after that, 2% will be deducted from the final grade. However, as per college-approved policy, more than five absences (excused or unexcused) will result in a failing grade. In keeping with the same spirit, students who attend all the classes in the semester will be eligible to receive an extra 2% in their final grade.

Each student is expected to attend all lectures and discussions in their entirety. Arriving late to class, working on anything other than class work and departing early can be considered as absences.

Also see

Texas Tech University Class Attendance Policy in pp. 51 and College of Architecture's attendance policies in pp. 101 of Tech University Graduate and Undergraduate Catalogue 2020-2021, available at https://www.depts.ttu.edu/officialpublications/pdfs/2020_2021_catalog_TTU.pdf

Additionally

If at any time during this semester you feel ill, in the interest of your own health and safety as well as the health and safety of your instructors and classmates, you are encouraged not to attend face-to-face class meetings or events. Please review the steps outlined below that you should follow to ensure your absence for illness will be excused. These steps also apply to not participating in synchronous online class meetings if you feel too ill to do so and missing specified assignment due dates in asynchronous online classes because of illness.

1. If you are ill and think the symptoms might be COVID-19-related:

a) Call Student Health Services at 806.743.2848 or your health care provider.

b) Self-report as soon as possible using the <u>ttucovid19.ttu.edu</u> management system. This website has specific directions about how to upload documentation from a medical provider and what will happen if your illness renders you unable to participate in classes for more than one week.

c) If your illness is determined to be COVID-19-related, remaining documentation and communication will be handled through the Office of the Dean of Students, including notification to your instructors.

d) If your illness is determined not to be COVID-19-related, please follow steps 2.a-d below.

2. If you are ill and can attribute your symptoms to something other than COVID-19:

a) If your illness renders you unable to attend face-to-face classes, participate in synchronous online classes, or miss specified assignment due dates in asynchronous online classes, you are encouraged to visit with either Student Health Services at 806.743.2848 or your health care provider. Note that Student Health Services and your own and other health care providers may arrange virtual visits.

- b) During the health provider visit, request a "return to school" note;
- c) E-mail the instructor a picture of that note;
- d) Return to class by the next class period after the date indicated on your note.

Following the steps outlined above helps to keep your instructors informed about your absences and ensures your absence or missing an assignment due date because of illness will be marked excused. You will still be responsible to complete within a week of returning to class any assignments, quizzes, or exams you miss because of illness.

14 PLAGIARISM

See 'Academic Integrity' pp.52, TTU Undergraduate and Graduate Catalogue, 2020-2021, available at <u>https://www.depts.ttu.edu/officialpublications/pdfs/2020_2021_catalog_TTU.pdf</u>

15 ACADEMIC INTEGRITY STATEMENT

Academic integrity is taking responsibility for one's own class and/or course work, being individually accountable, and demonstrating intellectual honesty and ethical behavior. Academic integrity is a personal choice to abide by the standards of intellectual honesty and responsibility. Because education is a shared effort to achieve learning through the exchange of ideas, students, faculty, and staff have the collective responsibility to build mutual trust and respect. Ethical behavior and independent thought are essential for the highest level of academic achievement that includes scholarship, teaching, and learning, all of which are shared endeavors. Grades are a device used to quantify the successful accumulation of knowledge through learning. Adhering to the standards of academic integrity ensures that grades are earned honestly. Academic integrity is the foundation upon which students, faculty, and staff build their educational and professional careers. See statement of ethical principles at https://www.depts.ttu.edu/ethics/matadorchallenge/ethicalprinciples.php

16 CIVILITY IN THE CLASSROOM STATEMENT:

Texas Tech University is a community of faculty, students, and staff that enjoys an expectation of cooperation, professionalism, and civility during the conduct of all forms of university business, including the conduct of student–student and student–faculty interactions in and out of the classroom. Further, the classroom is a setting in which an exchange of ideas and creative thinking should be encouraged and where intellectual growth and development are fostered. Students who disrupt this classroom mission by rude, sarcastic, threatening, abusive or obscene language and/or behavior will be subject to appropriate sanctions according to university policy. Likewise, faculty members are expected to maintain the highest standards of professionalism in all interactions with all constituents of the university (www.depts.ttu.edu/ethics/matadorchallenge/ethicalprinciples.php).

17 WITHDRAWING FROM CLASS

Please withdraw on or before the University drop date. Please do not request a grade of 'l' without documented reasons allowed by the university.

18 ADA STATEMENT

Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. 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, please contact Student Disability Services in West Hall or call 806-742-2405.

19 RELIGIOUS HOLY DAY STATEMENT:

"Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code §11.20. A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. A student who is excused under section 2 may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.

20 DISCRIMINATION, HARASSMENT, AND SEXUAL VIOLENCE STATEMENT:

Texas Tech University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from gender and/or sex discrimination of any kind. Sexual assault, discrimination, harassment, and other <u>Title IX violations</u> are not tolerated by the University. Report any incidents to the Office for Student Rights & Resolution, (806)-742-SAFE (7233) or file a report online at <u>titleix.ttu.edu/students</u>. Faculty and staff members at TTU are committed to connecting you to resources on campus. Some of these available resources are: TTU Student Counseling Center, 806- 742-3674, <u>https://www.depts.ttu.edu/scc/(Provides</u> confidential support on campus.) TTU 24-hour Crisis Helpline, 806-742-5555, (Assists students who are experiencing a mental health or interpersonal violence crisis. If you call the helpline, you will speak with a mental health counselor.) Voice of Hope Lubbock Rape Crisis Center, 806-763-7273, voiceofhopelubbock.org (24-hour hotline that provides support for survivors of sexual violence.) The Risk, Intervention, Safety and Education (RISE) Office, 806-742-2110, <u>https://www.depts.ttu.edu/rise/</u> (Provides a range of resources and support options focused on prevention education and student wellness.) Texas Tech Police Department, 806-742-3931, <u>http://www.depts.ttu.edu/ttpd/</u> (To report criminal activity that occurs on or near Texas Tech campus.)

21 LGBTQIA STATEMENT

Please see the resources that are available through the Office of LGBTQIA within the Center for Campus Life, Student Union Building Room 201, <u>www.lgbtqia.ttu.edu</u>, 806.742.5433."