ARCHITECTURAL DESIGN I	FALL 2021 ARCH 1301 SYLLABUS	TEXAS TECH COLLEGE OF ARCHITECTURE
CATALOG DESCRIPTION Introduction to foundational principles of observation, ordering, and analysis, for the purpose of communicating design strategies, as a precursor to design synthesis.		TIME GROUP 1 – M/W 9:00AM–11:50AM GROUP 2 – T/R 9:00AM–11:50AM GROUP 3 – T/R 1:30PM–4:20PM
INSTRUCTORS		ASSISTANTS
GALO CANIZARES – CO-COORDINATOR galo.canizares@ttu.edu ANALI GHARAKHANI – CO-COORDINATOR anali.gharakhani@ttu.edu SHAKIL SHIMUL shakil.shimul@ttu.edu		AFSANA SHARMIN afsana.sharmin@ttu.edu GRACE SHANKS Grace.Shanks@ttu.edu LANDON WADE Landon.D.Wade@ttu.edu RACHEL DANE Rachel.Dane@ttu.edu LUKE CONRAD Luke.Conrad@ttu.edu RAYMUNDO RETANA Raymundo.Retana@ttu.edu MATTHEW STEVENS Matthew.Stevens@ttu.edu ADRIAN REYNA Adrian.Reyna@ttu.edu JOSE HERRERA CHAVEZ Jose.Herrera-Chavez@ttu.edu CRISTIAN SOLIS Cristian.A.Solis@ttu.edu SAUL ORTEGA S.Ortega@ttu.edu ZACH DUNCAN Zach.Duncan@ttu.edu COLE HOWELL - SA Cole.Howell@ttu.edu MARI SPARACINO - SA Mari.Sparacino@ttu.edu JUDITH DUARTE - SA Judith.Duarte@ttu.edu TORYN ALLEN - SA Linsey.Laube@ttu.edu TORYN ALLEN - SA Toryn.Allen@ttu.edu JACQUELINE ESTRADA - SA Jacqueline.Estrada@ttu.edu
LOCATION 5 th Floor, Architecture building.		
OFFICE HOURS		
For coordinators, office hours will be by appointment only. Teaching Assistants and Student Assistants will have weekly office hours. Availability will be posted at the start of the semester. COMMUNICATION All communication should go through Blackboard. Questions about the course or assignments should first be directed to your section assistant. If they cannot address it, the instructors will be able to.		







Still from the game Monument Valley, by Ustwo Games.

COURSE DESCRIPTION

Architecture is all around us. But it is not just limited to the built environment. We see architecture in toys, movies, video games, comic books. We read it described in literature and cheap paperbacks. We smell it (that fresh concrete, or old wallpaper). Put simply: not only is architecture everywhere, but many unsuspecting things can also be *architectural*.

This course will introduce students to principles and techniques used to design, conceptualize, experience, discuss, and organize architecture. Though wide-ranging, flexible, and subjective in practice, for the context of this introduction, the principles discussed will be framed as the main rules that architecture has followed for a major part of its history and continues to use in the contemporary moment. In other words, though it is understood that at times rules must be broken, this course will focus on the rules themselves so that students will be well-prepared to work both within and outside of them in the future. We will explore what the prevalent rules of the discipline are and how they are used to bring architecture forth into the world.

The course is organized into three units: **Space**, **Form**, and **Order**. **Space** is defined here as any designated and intentionally constructed perceivable environment (you might ask then: what is not space? Perhaps: time, a threshold, a coordinate, a vacuum, the quantum realm). **Form** is defined here as the volumetric and shapely characteristics of objects in (or that define a) space. **Order** is defined here as the mode of organizing forms and spaces in a world (and yes, chaos is a type of organization). As principles of architectural design, Space, Form, and Order constitute the major ways we both conceptualize and make environments and buildings. Therefore, the semester will build up a repertoire for working with/through these three principles in interrelated ways.

In addition to conceptual understanding, a priority for the course will be contemporary techniques for designing and making objects. Students will be introduced to software and digital media used for both thinking through designs as well as producing final artifacts such as drawings and models. Our approach will be hybrid, oscillating between physical tools and digital environments such as 3D modeling software.

STUDENT LEARNING OBJECTIVES **TEACHING METHODS** After completion of this course, students should be This course will consist primarily of lectures and weekly assignments. Thematically, the semester will able to: describe and manipulate space (points, be broken down into three modules: vectors, scale, references). → Part I - SPACE describe and manipulate form (volumes, ∅ Mapping space, defining space, shape, movement, posture, measuring space. addition/subtraction). → Part II - FORM describe and manipulate order (hierarchy, ∅ Interpreting forms, documenting composition, grids, organizational forms, assembling forms. techniques). → Part III - ORDER use the outlined principles of architecture to Organizing objects in space, defining produce objects consisting of space, form, organizing systems, working with and order. organizing systems. □ understand the foundational language of Students are required to be taking notes during architectural design and its conventions. lectures. There will be weekly guizzes on the themes of the week including key words, so students are encouraged to record as much as they can. Students are also required to attend the College of Architecture lecture series. STUDENT PERFORMANCE OBJECTIVES NAAB CRITERIA PC.4 History and Theory—Understanding (U) After completion of this course, students should be SC.4 Technical Knowledge—Understanding (U) able to: Produce coherent drawings using design software. □ Communicate their design ideas and intentions coherently. □ navigate 2D and 3D space in software. translate digital drawing to physical model (and vice versa). MEANS OF EVALUATION **GRADING** Students will be evaluated through: class attendance, Assignment weights will be broken down as follows: weekly quizzes, design exercises, and a final project. Class attendance will be taken daily. It is the → Class attendance (10%) student's responsibility to be present at each class. → Weekly guizzes (10%) There will be weekly quizzes to test students' → Design exercises (50%) knowledge of key concepts covered thus far. Quizzes → Final project (30%) will be conducted through Blackboard, Design exercises will have outlined procedures and Grading will follow the TTU standard A-F grading expected results that will be clearly stated. The final scale. Grades will be posted through Blackboard or project will be conducted collaboratively as a team sent via university email. and will provide students the opportunity to showcase what they have learned throughout the semester.

COURSE REQUIREMENTS

Students must have some form of drawing-that is to say, making marks on a stable surface. This could be a digital tablet, paper sketchbook, or bundle of sticky notes...This will be used during every class. Additional materials will be requested on a per assignment basis.

There is an "architecture kit" available at the Varsity Bookstore that contains a wide range of useful materials for this course at a discounted price. This kit is NOT mandatory for Fall 2021, but students should be aware that it exists and is available to them.

Software/Hardware

Students must have and maintain their own laptop computer for this class. A computer is required on the first day and must meet the minimum specifications outlined at http://arch.ttu.edu/wiki/Computer Requirement.

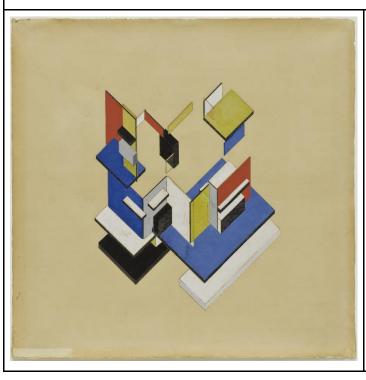
Students must have the latest versions of the following software installed on their computers:

Adobe Creative Cloud or Creative Suite. Specifically, students must have access to Acrobat, Photoshop, Illustrator, and InDesign.

Rhino3D (educational). Free 90 day trial is available.

Free and open-source alternatives to creative cloud can also be found here (however, these will not be covered in class, and so students should seek out tutorials outside of class time):

Photoshop - GIMP https://www.gimp.org/ Illustrator - Inkscape https://inkscape.org/ InDesign - Scribus https://www.scribus.net/





REQUIRED TEXTS

All texts will be provided via file sharing links.

→ Francis D.K. Ching, *Architecture: Form, Space, and Order* 4th ed. (Hoboken, NJ: John Wiley & Sons, 2015).

Online resources:

→ Socks Studio - https://socks-studio.com/

COURSE SCHEDULE*

*subject to change

		^subject to change
WEEK	TOPIC	ASSIGNMENTS
1 - 08/23/21	SPACE Mapping familiar spaces.	M/T: Exercise S1 – Mapping (from memory)
		W/Th: Exercise S2 – Mapping (controlled)
2 - 08/30/21	SPACE Tracing familiar spaces.	M/T: Exercise S3 - Tracing (Plan)
Quiz 1	Tracing familiar spaces.	W/Th: Exercise S4 - Tracing (Section)
3 - 09/06/21	SPACE Positive and negative	M/T: Exercise S5 - 3D figure-ground (positive)
Quiz 2	space – plan.	W/Th: Exercise S6 - 3D figure-ground (negative)
4 - 09/13/21	SPACE	M/T: Exercise S7 - 3D space (positive)
Quiz 3	Positive and negative space – section.	W/Th: Exercise S8 - 3D space (negative)
5 - 09/20/21	FORM Geometric solids, cutting,	M/T: Exercise F1 - Manipulating geometric primitives (vertices, edges, polygons, surfaces)
Quiz 4	splitting.	W/Th: Exercise F2 - Physically modeling geometric primitives (unrolling, paper folding)
6 - 09/27/21	FORM Boolean operations, addition + subtraction.	M/T: Exercise F3 - Performing boolean operations (addition)
Quiz 5 addition + subtract	addition + subtraction.	W/Th: Exercise F4 - Performing boolean operations (subtraction)
7 - 10/04/21	FORM Geometric control.	M/T: MIDTERM REVIEW
MIDTERM WEEK	Geometric control.	W/Th: Exercise F5 - Manipulating polysurfaces + complex volumes
8 - 10/11/21	FORM Geometric control.	M/T: Exercise F6 - Physically modeling complex volumes.
Quiz 7	Comenio control.	W/Th: Exercise F6 continued

9 - 10/18/21	ORDER Types of order,	M/T: Exercise O1 - Types of order (statics, equilibrium)
Quiz 8	composition.	W/Th: Exercise O2 - Types of order (kinematics, movement)
10 - 10/25/21	ORDER Final project.	M/T: Introduction to Final Project
Quiz 9	Final project.	W/Th: Final Project
11 - 11/01/21	ORDER Final project	M/T: Final Project
Quiz 10	Final project.	W/Th: Final Project
12 - 11/08/21	ORDER Final project	M/T: Final Project
Quiz 11	Final project	W/Th: Final Project
13 - 11/15/21	SPACE, FORM, ORDER	M/T: Final Project
FINAL WEEK		W/Th: Final Project

COURSE POLICIES

ATTENDANCE

Students are expected to attend all scheduled class meeting times and related events as outlined in the course syllabus. In general, there are five situations which constitute an "excused absence": personal illness, death of an immediate family member, military or government duty, University sanctioned events, and major religious holidays. Other situations may be evaluated on a case-by-case basis and students are encouraged to discuss with the instructor as soon as a potential issue arises. Documentation may be required.

DEADLINES

Students who miss deadlines due to valid, extenuating circumstances may submit the required work at a date agreed upon with the instructor. Students should contact the instructor to arrange a discussion within one week of the missed classes and/or work.

Unexcused work will not be accepted, incomplete projects will be evaluated in relation to their degree of completion.

Students should be aware that grade records are not required to be kept longer than two terms beyond the course offering. Any issues about grades should be reported to the instructor as soon as possible, and no later than the next active term (Fall term for spring or summer courses, spring for fall courses.)

PROJECT DOCUMENTATION

Students must provide project documentation as requested by the instructors of the course. Failure to provide this information by the deadline may result in a grade of "Incomplete" and could result in a drop in grade.

COVID-19 INFORMATION

Face Covering Policy: As of May 19, 2021, face coverings are now optional in TTU facilities and classrooms, and all other COVID-19 campus protocols have been lifted. It is highly recommended that those who have not been vaccinated for COVID-19 wear face coverings to help prevent the spread of the virus.

Seating Charts and Social Distancing: There is no longer a mandated social distancing protocol for classroom seating, but diligence is encouraged when indoors and not wearing masks. A seating chart might be used in the classroom to facilitate attendance, class interactions and other in-class engagement activities.

Illness-Based Absence Policy:

Absences will be excused and extensions will be granted with proper documentation. Details will be worked out on a case-by-case basis.

Personal Hygiene: We all should continue to practice frequent hand washing, use hand sanitizers after touching high-touch points (e.g., door handles, shared keyboards, etc.), and cover faces when coughing or sneezing.

Potential Changes: The University will follow CDC, State, and TTU System guidelines in continuing to manage the campus implications of COVID-19. Any changes affecting class policies or delivery modality will be in accordance with those guidelines and announced as soon as possible.

UNIVERSITY REQUIRED STATEMENTS

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.

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, which then must be measured. Academic achievement 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 grades are earned honestly. Academic integrity is the foundation upon which students, faculty, and staff build their educational and professional careers. [Texas Tech University ("University") Quality Enhancement Plan, Academic Integrity Task Force, 2010]

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.

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 Title IX violations 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 titleix.ttu.edu/students. 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, https://www.depts.ttu.edu/scc/(Provides 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, https://www.depts.ttu.edu/rise/ (Provides a range of resources and support options focused on prevention education and student wellness.) Texas Tech Police Department, 806-742-3931,http://www.depts.ttu.edu/ttpd/ (To report criminal activity that occurs on or near Texas Tech campus.)

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).

LGBTQIA SUPPORT STATEMENT*:

I identify as an ally to the lesbian, gay, bisexual, transgender, queer, intersex, and asexual (LGBTQIA) community, and I am available to listen and support you in an affirming manner. I can assist in connecting you with resources on campus to address problems you may face pertaining to sexual orientation and/or gender identity that could interfere with your success at Texas Tech. Please note that additional resources are available through the Office of LGBTQIA within the Center for Campus Life, Student Union Building Room 201, www.lgbtgia.ttu.edu, 806.742.5433."

*If you prefer to list campus resources rather than a statement about ally status, you might include the following among other campus resources you wish to share:

Office of LGBTQIA, Student Union Building Room 201, www.lgbtqia.ttu.edu, 806.742.5433 Within the Center for Campus Life, the Office serves the Texas Tech community through facilitation and leadership of programming and advocacy efforts. This work is aimed at strengthening the lesbian, gay, bisexual, transgender, queer, intersex, and asexual (LGBTQIA) community and sustaining an inclusive campus that welcomes people of all sexual orientations, gender identities, and gender expressions.