

**College of Architecture, Texas Tech University
Fall 2021**

ARCH 4341.090 Media Elective

Time: Tues/Thurs 12:30pm – 1:50pm (room 508)

**Instructor:
Dalia Munenzon**

**Email: dalia.munenzon@ttu.edu
Office hours by appointment - Tuesday 11am-12pm**



[Image: Elena Damiani. Excavaciones \(Extended field\). Four digital prints on silk chiffon. 2014](#)

Expecting Uncertainty: a toolkit for a restless climate

Catalog Description:

Analog or digital media options chosen from approved list. May be repeated for credit. (3)

Course Brief

Extreme climate events are reintroducing, with high intensity, uncertainty and volatility to our built environment. Climate adaptation repositions architecture and the design practice with the agency to respond to the unexpected. In this course, we will map hybrid landscapes to represent the complexities of the natural and built environment, examine and visualize climate impacts and events across certainty scales (from the stationary to the uncanny) and time horizons. We will construct visual narratives of spatial and environmental conditions to allow the critical examination of strategies used in practice to address climate adaptation. This course is an open inquiry into the representation of the ephemeral environment and the shifting time scales.

Media: mapping, critical cartography, photography, and illustration.

Geography: the extent of The Brazos River watershed, from the high plains to the coastal prairie.

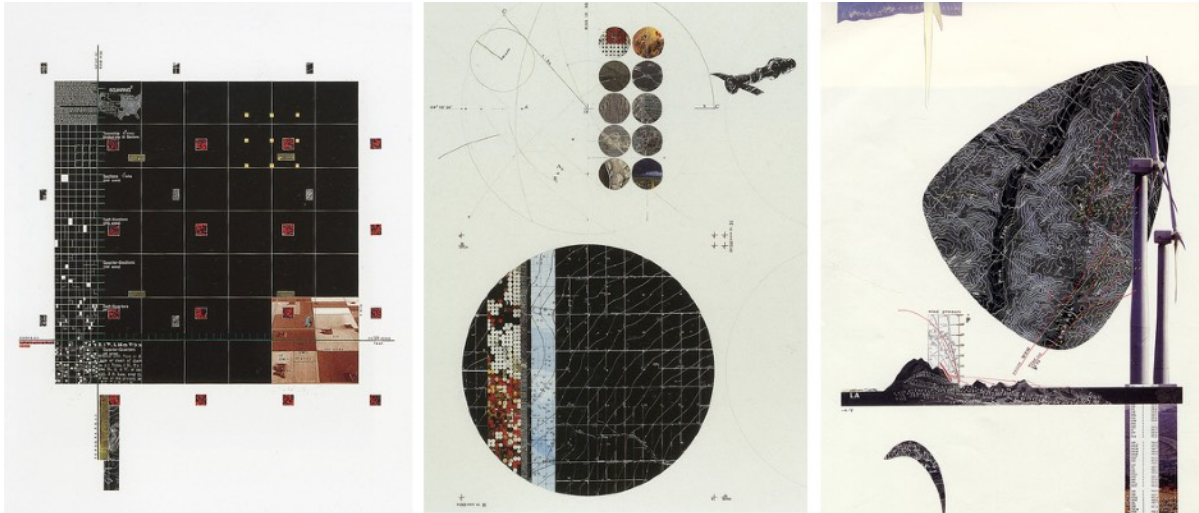


Image: James Corner and Alex MacLean, *Taking measures across the American landscape*. 2002

Students will select an environmental aspect and process in a specific geography/ site along the Brazos River watershed. The research will include a study into the timescales, natural cycles, tectonics, hydrology, urban flows, history, and place dynamics. The students will identify representation tools and practices to draw awareness, manage, address, leverage the process identified. In selecting and analyzing a condition/ environment/ site, we will explore temporal perception and narrative environments, land use and water dynamics, infrastructure (measures, mutability, and maintenance), air, and atmospheres. Using observation, maps, drawings, we will survey the Brazos River watershed.

Main deliverables - (1) One poster (format and template will be shared by instructor) with a graphic exploration and representation of the environment. (2) One poster (format and template will be shared by instructor) with proposed climate adaptation tool/strategy (3) A group atlas compiling the tool kit.

"And it appears that we are now in an era that will be defined precisely by events that appear, by our current standards of normalcy, highly improbable: flash floods, hundred year storms, persistent droughts, spells of unprecedented heat, sudden landslides, raging torrents pouring down from breached glacial lakes, and yeas freakish tornados."

Amitav Ghosh. *The great derangement: Climate change and the unthinkable*. 2017

Unprecedented, improbable, probable, projected, predictable, and uncanny are all words employed to characterize climate-related events. Both the likely and unlikely exist in mathematical models and projections; however, we grew accustomed to the consistent. Narratives of regularity, according to Amitav Ghosh, are the reason we are bewildered by extreme climate. Temporal awareness as a method to design and communication is a pertinent consideration in the contemporary context. What does it mean to observe the unexpectedness of climate? How can we adapt these concepts to spatial design?

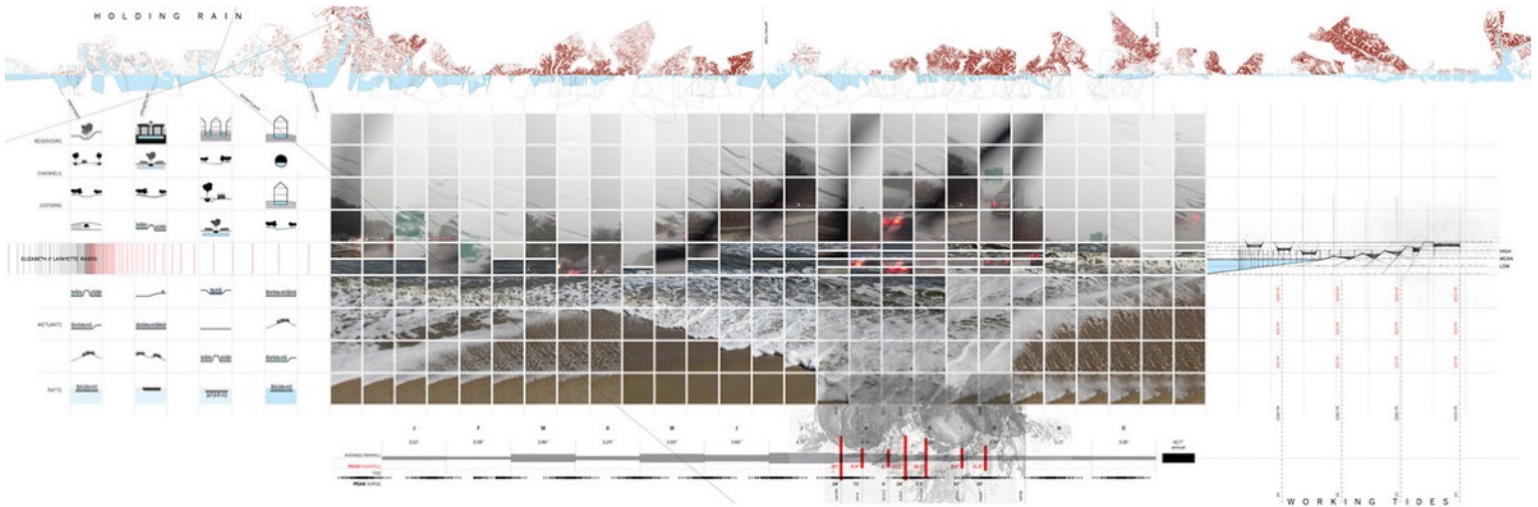


Image: Anuradha Mathur and Dilip da Cunha. 2019

Student Learning Objectives

1. To learn how to establish a narrative framework for discussing and representing temporal awareness and environmental dynamics concerning architecture, infrastructure, and urbanism.
2. To develop an applied understanding of contemporary environmental issues and risks as they relate to design and representation.
3. To develop the skills needed to articulate a coherent concept and synthesize a cohesive drawings set.
4. To demonstrate how knowledge of climate adaptation strategies can be applied on a specific site.

Student Performance Objectives

1. To experiment with various cartographic methods, apply them in our work, and critically reflect on them.
2. The ability to analyze a site across scales, time horizons, and systems.
3. To develop literacy with various computer applications and a knowledge of how and when to use them within the design process.
4. To apply a process of continual production (passion, dedication, and work ethic).

Image: Building with Nature: Creating, implementing, and upscaling Nature-based Solutions 2020



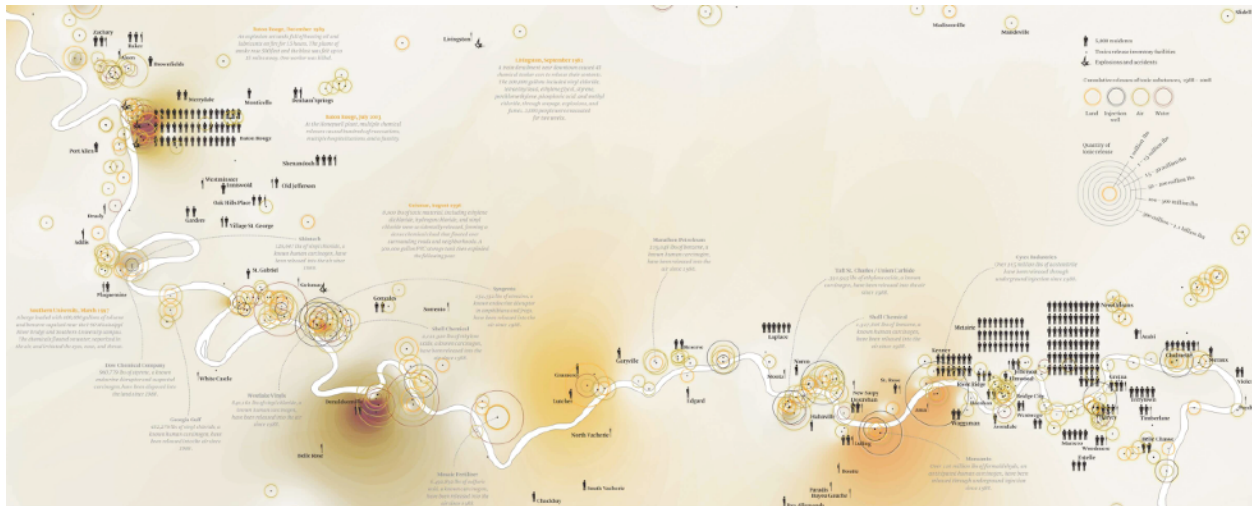


Image: Richard Misrach & Kate Orff, Petrochemical America. 2012

Means of Evaluation

1. Deliverables:

Project 1

Weeks 1-12

Precedents (ongoing), Students will be assigned a case study, to analyze and present to the class during the semester. On Thursdays a team of students will have 15 minutes to present a case study.

Project 2

This assignment is an ongoing and iterative process. The projects are additive and can be developed beyond the required submission. Deliverable: one large poster plot with environment - template will be provided by instructor

2.1 Weeks 2-3

Observation and research - select an environmental aspect and process in a specific geography/site.

[Week 1 - Review and discuss required reading book list](#)

[Week 2 - prepare for discussion site and issues to study.](#)

[Week 3 - presentation of two images/slides with ideas for the research subject.](#)

2.2 Weeks 4-5

Narrative - selection of one site from 1.1 - concept development, inspired by the research and based on the study into the timescales, natural cycles, tectonics, hydrology, and dynamics of the place.

[Week 4 - concept of initial narrative](#)

[Week 5 - Present references for forms of representation and mapping and 250 word paragraph with narrative statement.](#)

2.3 Weeks 5-8

Plot - the mapping/ visual representation of the environment and researched conditions. Students will continue to research the site, explore representation techniques, and learn relevant software.

Weeks 6-8 (Tuesdays) - students will bring progress for discussion and continue to develop plots and research.

Week 8 - midterm presentation draft plot - 24"X36" (template will be provided by instructor)

2.4

Weeks 9-13

Continue improving poster based on mid-review

Project 3

Weeks 9-13

Development of site specific climate adaptation strategies based on case studies - as a Plot overlay - poster #2

Weeks 9-13 (Tuesdays) - students will bring progress for discussion and continue to develop plots and research.

Week 13 (Thursday) - penultimate presentation of plot (template will be provided by instructor)

Project 4

Weeks 14-15

Compiled analysis atlas (template to be provided by instructor) -

Week 15 (TBD) - exhibit atlas and plots

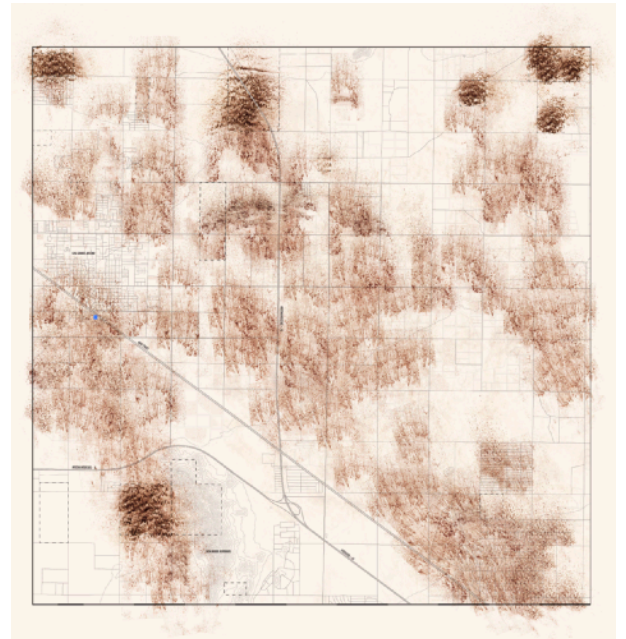


Image:

Danika Cooper, How To Draw a Dust Storm. 2019

2. Methods of Assessment

Criticism of project proposals, writing, documentation, drawings, maps, and process studies during class sessions, pinups and formal reviews will be the primary methods of assessment.

1. Completion of all deliverables in a timely manner
2. Thoughtful engagement with the design prompt and assignment requirements
3. General participation in class and reading discussions.
4. Comprehension and appropriate application of course readings and screenings.
5. Formal reviews, design criticism by individual instructors, assembled design juries and final booklet.

Teaching Methods/Studio Methods

Students will engage in various methods of work throughout the semester. Through research, observation, and representation techniques, the students will develop a cohesive narrative and communicate complex environmental and contextual issues.

The course has two primary tracks:

1. Adaptation design strategies - review of existing best practices and applications
 - Selective analysis - synthesize examples and precedents to evaluate the preferable strategy for a specific condition.
 - Contextual process and environmental conditions - identify climate risks on various urban and built environments.
2. The medium - learning approaches to the representation of hybrid environments, working with maps and plots as a medium, and developing visual tools.
 - Digital Drawing Fabrication - using computer design software to create communicative drawings.
 - Hybrid Drawing Fabrication - using digital and analog techniques in conjunction to create communicative drawings.

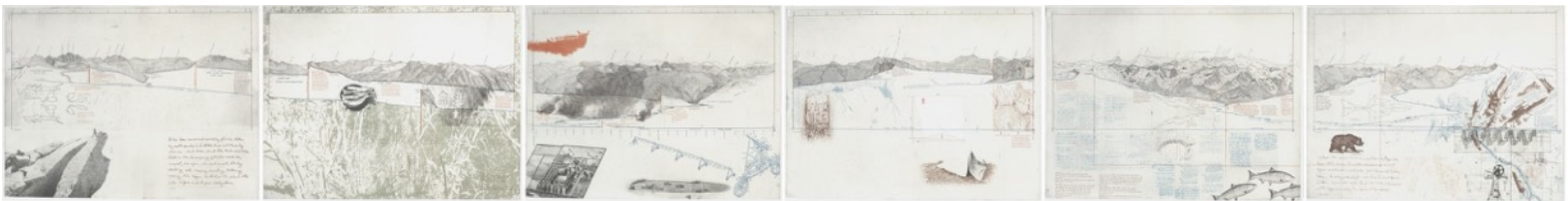
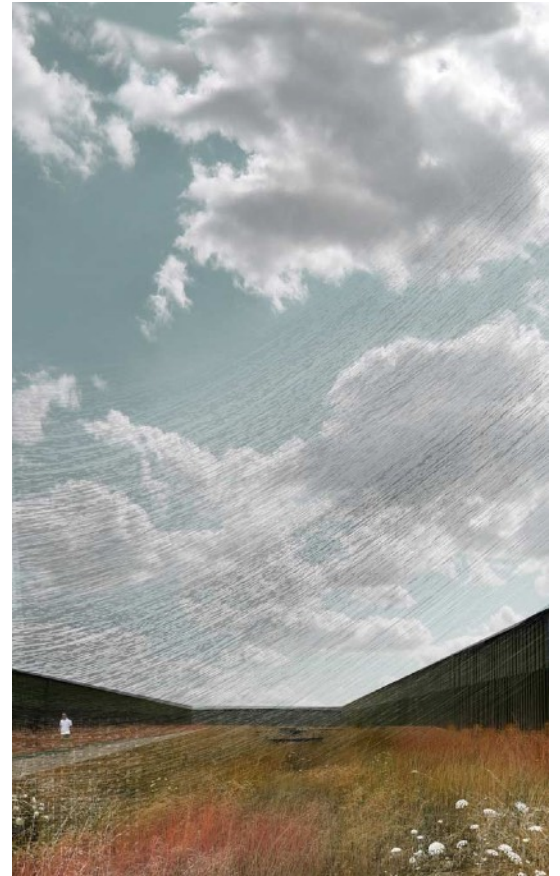


Image: Matthew Rangel, Sierra Nevada Codex, 2015

Course Schedule (TBD)

	Sunday	Mon	Tue	Wed	Thurs	Fri	Saturday
Week 1	22 August	23	24 Introduction, Syllabus overview	25	26 Climate Adaptation Strategies, Intro to project 1	27	28
Week 2	29	30	31 Workshop and Intro to assignment 2.1	1	2 Lecture by Sonny Xu and Grace Jiranuntarat from STOSS Landscape Urbanism	3	4

	Sunday	Mon	Tue	Wed	Thurs	Fri	Saturday
Week 3	5	6 Labor Day	7 Review assignment 2.1, Intro to assignment 2.2	8	9 Review assignment 2.1	10	11
Week 4	12	13	14 Workshop and case study presentations	15	16 Yom Kippur Independent work	17	18
Week 5	19	20	21 Review assignment 2.2, Intro to assignment 2.3	22	23 Review assignment 2.2	24	25
Week 6	26	27	28 Map as Medium Workshop and tutorial Adobe illustrator, Indesign	29	30 Case study presentation	1 Oct	2
Week 7	3	4	5 Workshop and tutorials	6	7 Case study presentation	8	9
Week 8	10	11 Midterm grading week	12 Mid- Review assignment 2.3 - pin up	13	14 Submit Project 2 Package	15	16
Week 9	17	18	19 Observation, sensing, and measuring	20	21 Jonah Susskind Senior Research Associate SWA Lecture, Case study presentation	22	23
Week 10	24	25	26 Workshop and discussion	27	28 Case study presentation	29	30
Week 11	31	1 Nov	2 Watershed and systems, Intro to project 4	3	4 Project 2 (2.4) and Project 3 pin up	5	6
Week 12	7	8	9 Workshop and discussion	10	11 Case study presentation	12	13
Week 13	14	15	16 Review Project 3	17	18 Review Project 3	19	20
Week 14	21	22	23 Workshop; previous exercises revisions	24	25 Thanksgiving	26	28
Week 15	29	30	1 December Last Day of Classes Presentation of Atlas - project 4	2	3	4	5



	Sunday	Mon	Tue	Wed	Thurs	Fri	Saturday
Week 16		6	Final submission (TBD)				

Course Reading

All readings are required and will be provided by the instructor. Additional readings may be assigned.

Video: Anuradha Mathur & Dilip da Cunha Lecture

<https://www.youtube.com/watch?v=h4F87bBclz0>

Texts:

Cooper, D. (2019) How to draw a dust storm, *Journal of Landscape Architecture*, 14:2, 36-41

Mattern S. (2013) "Methodolatry and the Art of Measure." *Places Journal*.

Mattern S. "How to Map Nothing," *Places Journal*, March 2021. Accessed 06 Sep 2021. <https://doi.org/10.22269/210323>

Anu Mathur and Dilip da Cunha in conversation with Nicholas Pevzner and Sanjukta Sen, "Preparing Ground," *Places Journal*, June 2010. <https://doi.org/10.22269/100629>

Roberts, L. (January 14, 2016). *Deep Mapping and Spatial Anthropology*. *Humanities*, 5, 1, 5.

Graphic and process references:

Bouw, M., & In Eekelen, E. (2020). *Building with nature: Creating, implementing and upscaling nature-based solutions*.

Benedito, S., & Baan, I. (2021). *Atmosphere anatomies: On design, weather, and sensation*.

Corner, J M., and MacLean, A. (2000) *Taking Measures across the American Landscape*.

Mathur, A., & Cunha, D. . (2014). *Design in the terrain of water*. Novato: Applied Research + Design Publishing.

McHarg, I. L. (1995). *Design with nature*. New York: John Wiley.

Misrach, R., & Orff, K. (2012). *Petrochemical America*. New York: Aperture.

Reference Texts

Boia, L. (2005). *The Weather in the Imagination*. Reaktion Books.

Beck, U., Ritter, M., & SAGE Publishing. (2013). *Risk society: Towards a new modernity*. Los Angeles: SAGE.

Cunha, D. (2019). *The invention of rivers: Alexander's eye and Ganga's descent*.

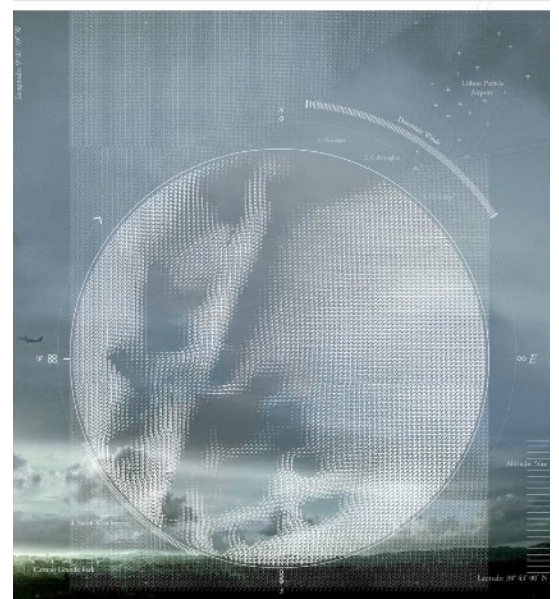
Ghosh, A. (2017). *The great derangement: Climate change and the unthinkable*. Chicago: The University of Chicago Press.

Manough, G., & Nevada Museum of Art,. (2013). *Landscape futures: Instruments, devices and architectural inventions*.

Klinenberg, E. (2015). *Heat wave: A social autopsy of disaster in Chicago*.

Ovink, H., & Boeijenga, J. (2016). *Rebuild by design. New approaches to climate change*.

Smout Allen. (2007) *Augmented Landscapes*: Smout Allen.



Images: OFICINAA/ Silvia Benedito, *Aeolian Fields and Landscape Meteorology Series 2014*

Course Requirements

Students will need access to a working computer capable of running current working editions of Adobe Suite: Photoshop, Adobe Illustrator, Adobe InDesign, QGIS, Rhino; a smartphone or digital camera; and sketchbook.

All digital work should be regularly backed up and organized with proper naming. File iterations, versions, and save multiple variations of work in an organized fashion.

Progress will be uploaded weekly to a shared Miro board.
Research sources will be collected on are.na

Printing:

Output of work and review prints is vital to productive design process. Efforts will be made to accommodate PDF reviews when possible, however each student should be prepared to print as needed to complete assignments. Printing can occur at the college Print Bureau or any other means that produces effective results. Utilize scratch paper, recycle and up-cycle as possible.

Grading

Grading Scale:

- A. Excellent work. Work is thoughtfully executed, engages critically with the prompt, and goes beyond the given requirements.
- B. Good work. Work is thoughtful and engages the prompt. Requirements are met and well executed.
- C. Average work. Work is completed and fulfills the requirements.
- D. Inadequate work. Work does not fully satisfy expectations or requirements.
- E. Incomplete or missing work

Course Assessment:

Project 1 - 15%

Project 2 - 30%

Project 3 - 30%

Project 4 - 15%

Class Participation - 10%

All coursework must be completed on time, unless otherwise agreed upon prior by instructor due to extenuating circumstances. Late or incomplete work will result in a reduction of grade by at least one half of a letter grade.

2020 NAAB Criteria Met

Professional Communication Skills: Ability to write and speak effectively and use representational media appropriate for both within the profession and with the general public.

VALUES (V) _ Shared Values of the Discipline and Profession

The program must report on how it responds to the following values, all of which affect the

education and development of architects. The response to each value must also identify how the program will continue to address these values as part of its long-range planning. These values are foundational, not exhaustive.

Knowledge and Innovation: Architects create and disseminate knowledge focused on design and the built environment in response to ever-changing conditions. New knowledge advances architecture as a cultural force, drives innovation, and prompts the continuous improvement of the discipline.

PROGRAM CRITERIA (PC)

A program must demonstrate how its curriculum, structure, and other experiences address the following criteria.

PC.2 Design

How the program instills in students the role of the design process in shaping the built environment and conveys the methods by which design processes integrate multiple factors, in different settings and scales of development, from buildings to cities.

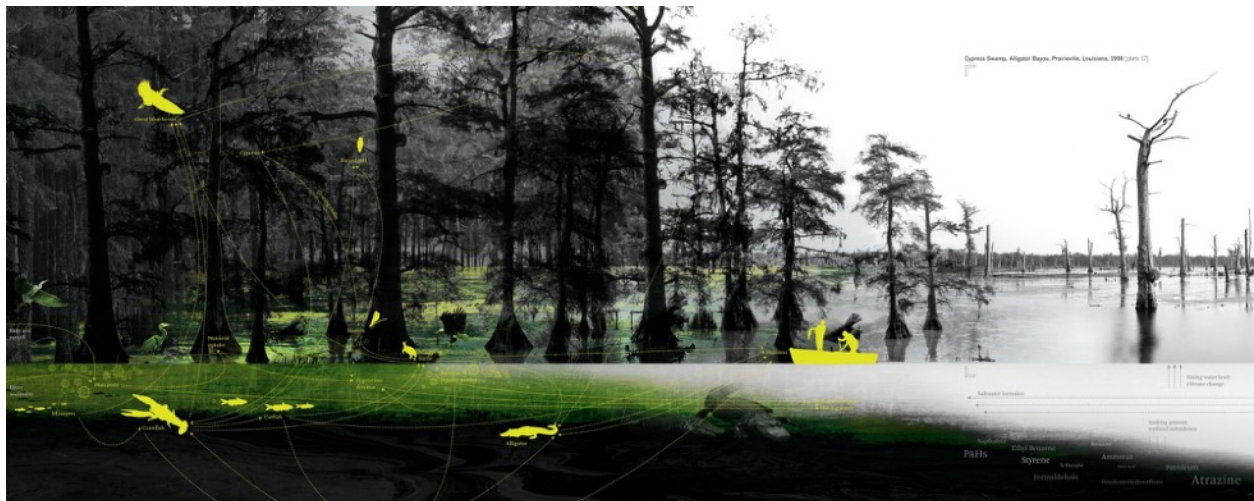


Image: Richard Misrach & Kate Orff, Petrochemical America. 2012

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:

[Instructors of Record may revert to their pre-pandemic absence policies regarding illnesses but take into consideration the variant effects of COVID-19 on people when students report absence due to the virus (e.g., some may need extended days of absences and time to make up missed work).]

In-Person Office Hours: [IoRs may provide their own statement here with provision that masks are optional but social distancing may be expected.]

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

Please consult the Texas Tech University Undergraduate and Graduate Academic Catalog 2021-2022 and the Texas Tech University Student Handbook for information about dropping a course, reporting illness, absence due to religious observance and academic integrity.

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

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

“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

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 of Student Conduct, (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, (24-hour hotline that provides support for survivors of sexual violence.) The Risk, Intervention, Safety and Education (RISE) Office, 806-742-2110, (Provides a range of resources and support options focused on prevention education and student wellness.) Texas Tech Police Department, 806-742-3931, (To report criminal activity that occurs on or near Texas Tech campus.)

Civility in the Classroom

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. Consult TTU's Statement of Ethical Principles.

LGBTQIA Support

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.lgbtqia.ttu.edu, 806.742.5433.

Attendance Policy

The CoA's Attendance Policy states that students are responsible for attending all scheduled class meetings for the full class period. A total of four (4) absences is considered excessive, requiring the student to drop the course or receive a grade of “F” in compliance with drop deadlines.

Arriving late or leaving early will be recorded as a partial absence. All absences are considered unexcused except absences due to religious observance or officially approved trips. Students are expected to comply with rules for reporting student illness requiring absence from class for more than one week or immediate family member deaths. See Academic Regulations. Attendance is defined as full participation in all class activities including group and individual critiques, lectures, presentations, demonstrations, discussions, in class assignments, and possible field trips. Attendance requires students to have the necessary tools and supplies available for all class activities (i.e.: computer, drawing and modeling materials, and shop safety equipment). Excessive tardiness, leaving early, lack of participation, walking in and out, undivided attention, goofing around, and disruptive behavior will be recorded as an absence. In addition, working on assignments from other classes is not allowed during class time.

Retention of Work

I give the College of Architecture and Texas Tech University, and/or Texas Tech University System (herein, "Texas Tech") the absolute right and unrestricted permission to collect, use, publish, reproduce, edit, exhibit, project, display and/or copyright work created by me during the course of my education at Texas Tech, through any form (print, digital, physical model, broadcast or otherwise) at any campus or elsewhere, for art, advertising, future accreditation, visiting committees, recruitment, marketing, fund raising, publicity, archival or any other lawful purpose.