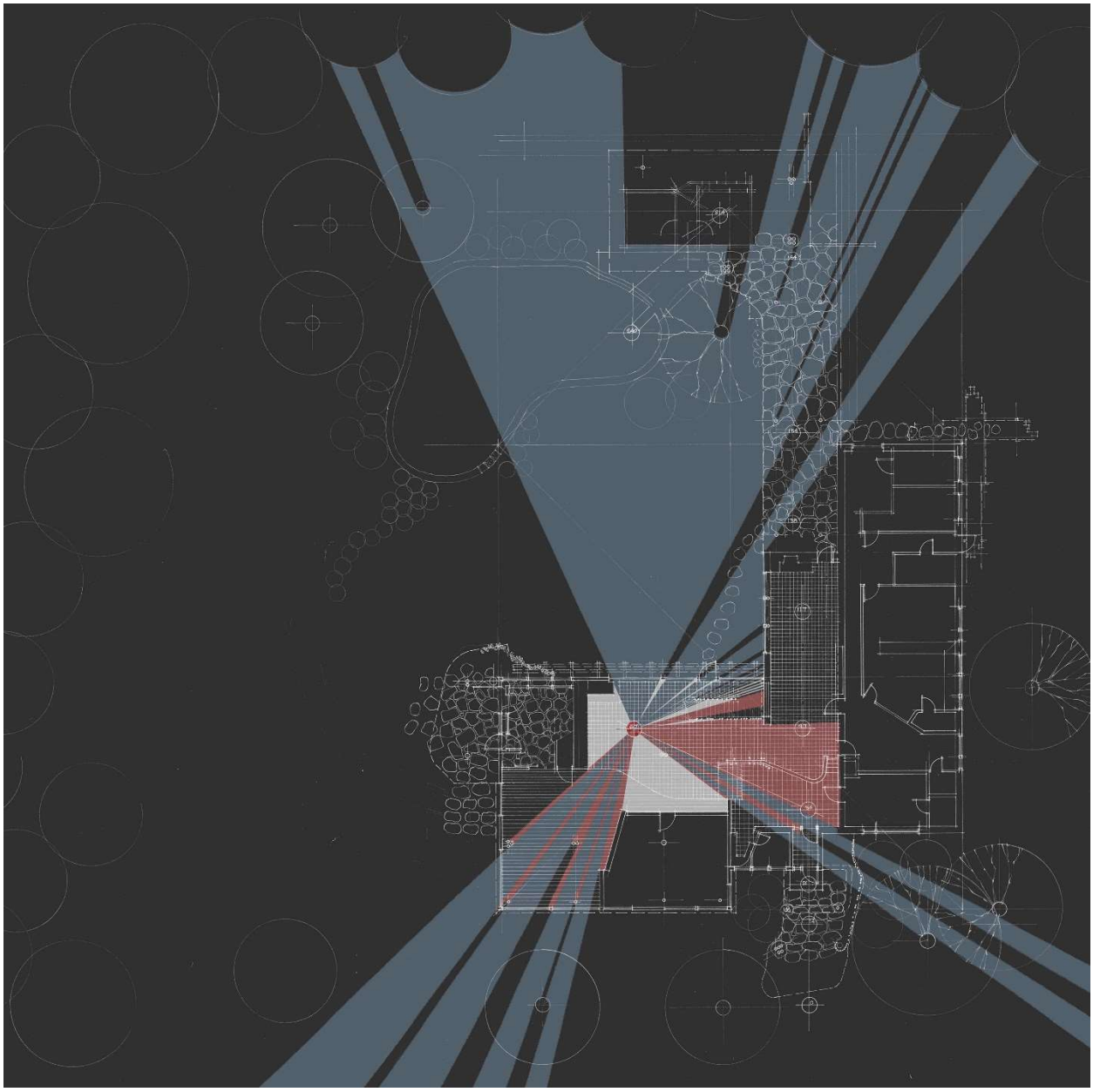
HAPTIC RETREAT | sense of touch



Villa Mairea (Alvar Aalto) Masters of Design Study

Arch 4601
Fall 2021
Architectural Design 7
6 semester credit hours
Classroom 708

Instructor
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Phone 806.445.1131

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1. COURSE REQUIREMENTS

Provides instruction in advanced architectural design projects. Students develop integrated design skills negotiating the complex issues of program, site, and form in a specific cultural context. Integrates aspects of architectural theory, building technology, and computation into the design process.

Meeting course requirements through design of a haptic retreat and balancing the following factors

A. **People |** Clients, community and cultural context, program
B. **Things |** Site, energy, climate, building technology, and computation, precendents
C. **Ideas |** Architectural theory, Combining a haptic approach with a climate approach to design

The purpose of this fourth-year studio is to develop and integrate your architectural knowledge and skills to design a facility that will serve as a sensory retreat on a complex site. You design will balance theory with the needs of the client and personality of the site. Your design will include the strategies that enhance the user's ability to experience the space, while the response to the site and climate will include some passive energy strategies.

Your job in this course is go beyond the visible and into the

haptic realm as you design a project that will respond to the

local climate and site.

2. LEARNING OBJECTIVES AND SKILLS[1], MEANS OF EVALUATION, STUDIO METHODS, GRADING

student learning objectives	associated student skills[2]	evaluation/grading*
1. Develop site design to support wellness 2. Develop site design to reduce building energy use	Site analysis Passive design strategies for massing	Studio review 1, 15% grade See following section, "Review Requirements"
3. Develop building form, including structural grid and scheme for mechanical	Grid systems and their implications for structure, program, space, and adaptability Reflected ceiling plans and integrating structure, space, and systems	Studio review 2, 25% grade See following section, "Review Requirements"
4. Develop the building material form to provide: 4a. haptic indoor environmental quality 4b. reduced material embodied energy and building energy use	Applying principles in design for: * indoor environmental quality * reduced material and energy use	Studio review 3, 35% grade See following section, "Review Requirements"
5. Present a complete final project with visual and verbal clarity and (optional, but preferred) with joy	Strategies for verbal and visual narration Student ownership of an intellectually and formally coherent project	Final review, 25% grade See following section, "Review Requirements"

*Grading

Grading follows standards from TTU Operating Policy 32.12.

A = Excellent; B = Good; C = Average; D = Inferior (passing, but not necessarily satisfying degree requirements); F = Failure

3. REVIEW REQUIREMENTS

Your studio grade will be based on four reviews. Drawing lists for each review appear below and drawing standards appear in Appendix 1.

[1] Meet NAAB SC.1 Health, Safety and Welfare in the Built Environment and SC.5 Design Synthesis
[2] These are student performance objectives for this course.

4601 Review 1: Site Analysis and Preliminary Design, September 3

1. Work from small groups: site model (1" = 20'); site history and background, and code and site information.

2. Site plan series that conveys site extents, topography, flood plains, easements, required setbacks, and existing plantings, roads, and buildings (5: develop at 1'0" = 1/64")

3. Site sections that convey topography and existing plantings, roads, and buildings (5: develop at 1'0" = 1/64")

4. Site photos

5. Diagrammatic analysis of prevailing active and vehicular transit (e.g., walking, cycling, cars, watercraft).

6. Three specific site options developed with building area (approx. 5000 sf) in plan, diagrammed for the following (3: develop at 1'0" = 1/32"):

a) Prevailing winds and potential for passive ventilation
b) Solar orientation and potential for solar heat gain
c) Solar orientation and potential for visual glare
d) Solar orientation and potential for daylighting
e) Potential vehicular access path
f) Potential pedestrian and cycling paths

4601 Review 2: Concept Design for a Building with a Life: Form, Structure, and Systems, September 27

1. Title

2. 25-50 word narrative

3. Program diagrams: At 1'0" = 1/16", draw all programmatic items in plan and section. Array and label them.

4. Adjacencies graph identifying key spaces that should be directly connected, visually connected, or within threshold distances of one another.

5. For two precedents - analysis of column grids and how they integrate program, technology, and aesthetics.

6. Development of three column grid concepts in plan, section, and plan oblique (1'0" = 1/16").

For each iteration, include:

Plans: 6 total; 2 programs by three column grid designs; show programmatic zones (1'0" = 1/8")

Exploded plan oblique including layers for foundation, column grid, HVAC, and roof: 6 total; 2 programs by three column grid designs; show programmatic zones. (1'0" = 1/8")

Elevations that establish a relation of fenestration to the column grid: 3 total, 1 per column grid (1'0" = 1/8")

Sections that show spatial attributes and integration of building technology: 3 total, 1 per column grid (1'0" = 1/8")

Predesign and concept design will be developed into a research book with the following sections: user, program, context, and precedent studies.

4601 Review 3: Design Development, October 22

1. Title
2. 50-word narrative
3. Plans: All floors, roof, reflected ceiling plan (1'-0" = 1/8"); include plan lower showing accessibility
4. Building sections: 2, (1) longitudinal and (1) cross (1'-0" = 1/8")
5. Building elevations: 4 (1'-0" = 1/8")
6. Wall section (1'0" = 1/2")
7. Exploded plan oblique including foundation, column grid, HVAC, and roof. 1'0" = 1/16"
8. Full building section with developed interior elevations: (1'0" = 1/2").
9. Section perspective (not to scale)
10. Photos of study models showing simulated lighting conditions.
11. Physical model (1'-0" = 1/8")
12. Patient p.o.v. render series, 5 renders
13. Provider p.o.v. render series, 5 renders
14. Community member p.o.v. render series, 5 renders

4601 Final Review, Nov 17 /19

Revision and presentation of items from Review 3

Boards (exact format TBD)

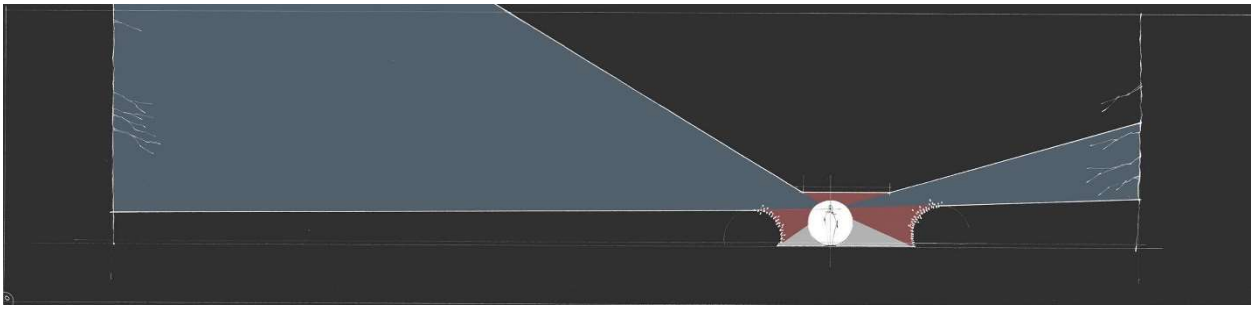
Book (online hosting, exact format TBD)

4. PROGRAM

To be developed in class.

5. PRECEDENTS

1. Villa Mairea, Alvar Aalto 1937-1939
2. To be determined based on emerging needs



6. SCHEDULE OF CLASS MEETINGS

Subject to change

The schedule of class meetings below contains information on project phase, lectures, reviews, and holidays. Individual studio meetings not otherwise specified will be conducted at the discretion of your specific instructor.

In-studio lectures are an important source of perspectives, skills, and resources.[3] They have been planned to aid your work on your project and to deliver key information that you should learn in this course. You should think of the lectures as the verbal, distributed textbook for the studio. Information in lectures will not necessarily be conveyed elsewhere; in many cases, the material does not exist in other forms. ***Do. Not. Miss. Lectures.*** And, if you must, be sure to view the recordings, which will be made available to all students.

Please also note that the largest chunk of your grade will be issued for the design development phase. While most of this work falls in October, your success in design development will depend on diligent work in the prior phases. The grade weights for each phase are proportional to the number of studio meetings that constitute that phase.

Week	Date	Phase	In-studio topic	In-studio activity
1	M Au 25	Pre	***All-school meeting & lottery*** no studio meeting	All-school meeting
1	W Au 25	Pre	***WELCOME, OVERVIEW, SYLLABUS REVIEW*** *BEGIN PREDESIGN* Group work	Studio & phase overview In-class work
1	F Au 27	Pre	site plans and sections; preliminary design of three site options with observed site conditions	
2	M Au 30	Pre	***SUSTAINABLE SITE DESIGN, 1-2pm*** (McReynolds) Site options with climate and circulation implications	***ALL-STUDIO LECTURE*** In-class work, desk crits
2	W Sep 1	Pre	Complete and prepare presentation format	In-class work, desk crits
2	F Sep 3	Pre	***PRE-DESIGN: IN-CLASS REVIEW (Zook)***	***PRE-DESIGN REVIEW*** *(15% grade)*
	M Sep 6	---	***NO CLASS: ENJOY YOUR LABOR DAY***	
3	W Sep 8	Concept	***HEALTH AND SUSTAINABILITY: BASE BUILDING + INFILL, 1-2pm*** (Zook) For Friday, read	***ALL-STUDIO LECTURE*** Phase overview
			PRE-DESIGN: IN-CLASS REVIEW (Cooke)	***COOKE PRE-DESIGN REVIEW*** *(15% grade)*
			Zook: BEGIN CONCEPT DESIGN Analysis of grid precedent	
3	F Sep 10	Concept	Analysis of grid precedent	In-class work, desk crits

[3] The lectures teach the following NAAB Values and Program Criteria: V.1 Design, V.5 Leadership, Collaboration, and Community Engagement, PC.1 Career Paths, PC.2 Design, PC.6 Leadership and Collaboration

Week	Date	Phase	In-studio topic	In-studio activity
			Analysis of program	
4	M Sep 13	Concept	***INTERVENING + RENOVATING, 1-2pm*** (Martinez) Three grid iterations with programmatic overlay in plan	***ALL-STUDIO LECTURE*** In-class work, desk crits
			CoA Lecture: Pl.KL Studio: Open Practice, 3pm	***CoA Lecture***
4	W Sep 15	Concept	In-class presentation of grid precedents, program	In-class presentation
4	F Sep 17	Concept	Development of grid concepts	In-class work, desk crits
5	M Sep 20	Concept	***PASSIVE COOLING DESIGN , 1-2pm*** (Aranha) Three grid iterations with programmatic overlay in plan	***ALL-STUDIO LECTURE*** In-class work, desk crits
5	W Sep 22	Concept	Development of grid concepts	In-class work, desk crits
5	F Sep 24	Concept	Development of research book as presentation	In-class work, desk crits
6	M Sep 27	Concept	***CONCEPT REVIEW JURORED REVIEW***	***CONCEPT REVIEW*** *(25% grade)*
			CoA Lecture: Dawn Finley Lecture: System of Novelties, 3pm	***CoA Lecture***
6	W Sep 29	DD	***CONCEPT REVIEW JURORED REVIEW***	***CONCEPT REVIEW*** *(25% grade)*
			MATERIAL ASSEMBLIES, 1-2pm (Raab) *BEGIN DESIGN DEVELOPMENT* For Wednesday, read "How Plastic is a Function of Colonialism" For Wednesday, view "Closing remarks to the Lancet"	***ALL-STUDIO LECTURE*** In-class work, desk crits
6	F Oct 1	DD	***PERSPECTIVE/REVIT DEMO, 1-2pm*** Plans	Cooke lecture for Sustain Health sections In-class work, desk crits
8	M Oct 4	DD	***SENSORY DESIGNAND LEARNING FROM DISABILITY, 1-2pm*** (Wade) Sections	***ALL-STUDIO LECTURE*** In-class work, desk crits
7	W Oct 6	DD	Elevations	In-class work, desk crits
7	F Oct 8	DD	Wall section	In-class work, desk crits
8	M Oct 11	DD	***DRAWING SETS, 1-2pm*** (Wahlberg) Exploded plan oblique For Wednesday, read "Beauty is a method"	***ALL-STUDIO LECTURE*** In-class work, desk crits
8	W Oct 13	DD	Interior elevations	In-class work, desk crits
8	F Oct 15	DD	Render sketches	In-class work, desk crits
9	M Oct 18	DD	Render drafts	In-class work, desk crits
9	W Oct 20	DD	Render drafts, presentation formatting	In-class work, desk crits
9	F Oct 22	DD	***DESIGN DEVELOPMENT JURORED REVIEW***	***DESIGN DEV REVIEW*** *(35% grade)*
10	M Oct 25	Final	***BOOKS, COMPETITIONS, PRESENTATION, 1-2 pm*** ***ISSUE FINAL***	Zook lecture for Sustain Health sections In-class work, desk crits

Week	Date	Phase	In-studio topic	In-studio activity
10	W Oct 27	Final	Revision and presentation prep	In-class work, desk crits
10	F Oct 29	Final	Revision and presentation prep	In-class work, desk crits
11	M Nov 1	Final	Revision and presentation prep	In-class work, desk crits
11	W Nov 3	Final	Revision and presentation prep	In-class work, desk crits
11	F Nov 5	Final	Revision and presentation prep	In-class work, desk crits
12	M Nov 8	Final	Mock review	In-class mock review
12	W Nov 10	Final	Revision and presentation prep	In-class work, desk crits
12	F Nov 12	Final	Revision and presentation prep	In-class work, desk crits
13	M Nov 15	Final	Revision and presentation prep	In-class work, desk crits
13	W Nov 17	***Final***	***FINAL REVIEW***	***FINAL REVIEW **** *(35% grade)*
13	F Nov 19	***Final***	***FINAL REVIEW***	***FINAL REVIEW **** *(35% grade)*
14	M Nov 22		***POST FINAL REVIEW***	
14	W Nov 24		***NO CLASS: ENJOY YOUR HOLIDAY***	
14	F Nov 26		***NO CLASS: ENJOY YOUR HOLIDAY***	
15	M Nov 29		***POST FINAL REVIEW***	
15	W Dec 1		***POST FINAL REVIEW***	
15	F Dec 3		***NO CLASS: STUDY DAY***	
16	M Dec 6		***NO CLASS: FINAL EXAMS PERIOD***	
16	W Dec 8		***NO CLASS: FINAL EXAMS PERIOD***	
16	R Dec 9		***NO CLASS: SEMESTER ENDS***	

7. UNIVERSITY STATEMENTS ON COVID

PREVENTING COVID-19

1. Vaccinations

COVID-19 vaccinations are strongly encouraged by TTU and the CoA. The delta variant is spreading across our city and the country and the best way to protect your

health and the health of others is to get vaccinated. The university also has a vaccine incentive program. See here for details: https://www.depts.ttu.edu/communications/emergency/coronavirus/vaccination-incentives/

Please go here to learn more about the safety and efficacy of the COVID-19 vaccine: https://www.depts.ttu.edu/communications/emergency/coronavirus/vaccination-incentives/

Where to receive a COVID-19 vaccine?

Off campus:

- Your local pharmacy
- Your physician
- The City of Lubbock is hosting several clinics: https://ci.lubbock.tx.us/departments/health-department/covid-19/covid-19-vaccine
- The City of Lubbock is hosting a pop up clinic Thursday-Sunday, from noon-close, inside the South Plains Mall- location D06 across from Claire's and Journeys Kidz

On campus:

- The Texas Department of Emergency Management (TDEM) will operate a COVID-19 vaccination clinic from August 11-17 at the one-stop-shop back-to-school event at Holden Hall. After August 17th, vaccinations will be available on campus at Student Health Services.
- On August 20th, vaccinations will be available at 18th and Flint from 10.m. to 2 p.m. in a City of Lubbock Mobile Vaccination Bus
- On August 26th, vaccinations will be available at Memorial Circle from 10.m. to 2 p.m. in a City of Lubbock Mobile Vaccination Bus

Students should submit their COVID-19 vaccination record here: https://auth.medproctor.com/cas/login?service=https://secure.medproctor.com/casHandler

2. ***Masks***

Face coverings are welcome and encouraged to help mitigate the spread of COVID-19. Masks will be available in all College of Architecture classes.

EXPOSURES AND SYMPTOMATIC COVID-19

Testing

- Students that are exhibiting symptoms of COVID-19 should contact Student Health Services immediately and schedule an appointment for testing. The cost for testing provided through Student Health Services will be billed to insurance for those students that are covered. Insurance pays 100 percent of the testing costs. The self-pay cost is $40 and can be posted to a student's account through Student Business Services. To make an appointment, please call **806-743-2848**.
- COVID-19 testing is also offered at numerous pharmacies across the City of Lubbock.
- The City offers testing sites found here: https://ci.lubbock.tx.us/departments/health-department/covid-19/covid-19-testing-location
- **Where to report a positive diagnosis**: https://ttucovid19.ttu.edu/User/Consent

Quarantine and Isolation Procedures

- Fully vaccinated students (including those with medical and religious exemptions) that aren't experiencing symptoms will not be required to quarantine following an exposure to a COVID-19 positive person, including roommates. Following a known exposure, students should monitor for symptoms over the course of 14 days and quarantine if symptoms develop.
- Fully vaccinated students that receive a positive diagnosis for COVID-19 will be required to self-isolate. Students that are vaccinated, including those with medical and religious exceptions, and live in university housing will be provided with a location to complete the self-isolation period. If an off-campus location is necessary, the university will cover the associated housing expenses.
- Unvaccinated or undisclosed students that have been identified as having a known exposure to a COVID-19 positive person will be required to quarantine for a minimum of 7 days or longer depending upon testing. If a student is unvaccinated and can prove a COVID-19 diagnosis and recovery in the last three months, quarantine will not be required.
- Unvaccinated or undisclosed students that receive a positive diagnosis for COVID-19 will be required to self-isolate. The university will offer information regarding off-campus options for unvaccinated students that reside in university housing to complete the self-isolation period but will not cover any associated expenses,

8. OTHER UNIVERSITY 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 possi-

ble 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:

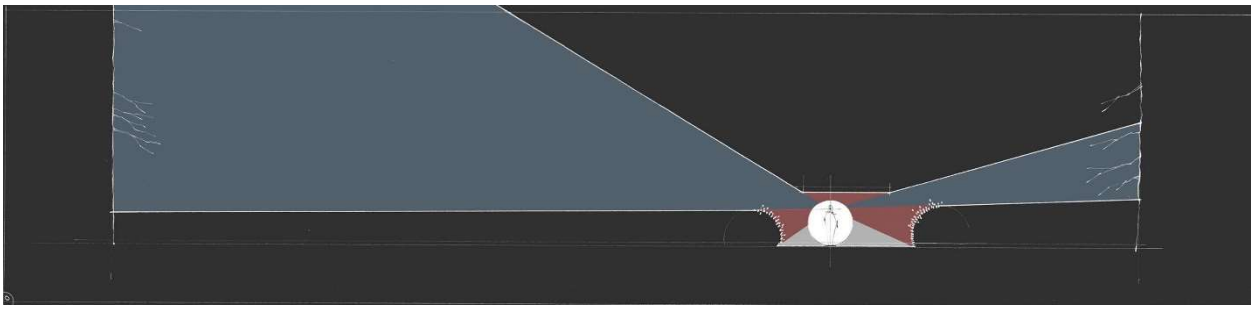
Academic integrity is taking responsibility for one's own class and/or course work, being individually accountable, and demonstrating intellectual honesty and ethical behavior. Academic integrity is a personal choice to abide by the standards of intellectual honesty and responsibility. Because education 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 mem



bers 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.)

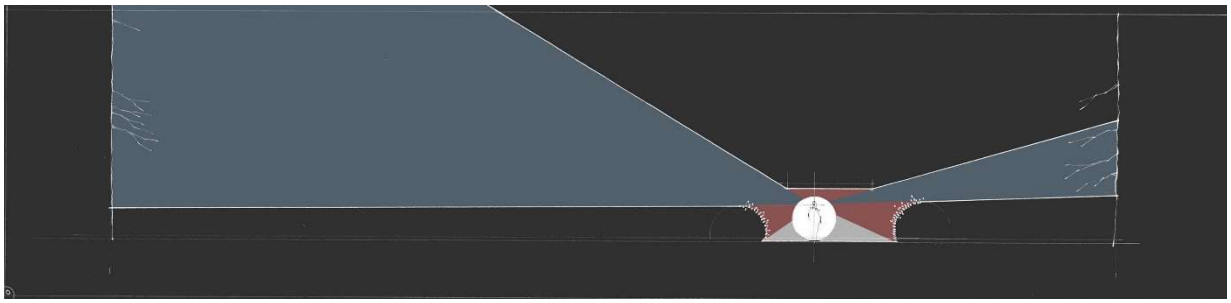
CIVILITY IN THE CLASSROOM STATEMENT:

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*:

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.



APPENDICES

APPENDIX 1: DRAWING STANDARDS

Drawing standards should be met if a drawing is to be considered ***complete.***

Plans

A. Ground level shows contour; site design elements including parking paths, sidewalks, vegetation, and plantings; site extends to midline of road; must be wheelchair accessible to include accessible parking space, signage, curb ramp, route to an entrance; internal elevator and two stairs required if multiple stories.

B. All levels same scale.

C. Clear graphic differentiation between interior and exterior.

D. Rational, well-designed thicknesses of walls, columns, partitions, panels, glass, railings, retaining walls, ramps, stairs, railings.

E. Drawing title, graphic scale, north arrow, and key cuts for corresponding sections.

F. Elevation markers or height labels on reflected ceiling plans.

G. Program space names labeled or numbered with a key list.

Sections

H. Appropriate thickness of floors, roof, and walls.

I. Clear graphic differentiation between interior and exterior.

J. Drawing title, graphic scale, and clear reference to cut points on corresponding plans.

K. Elevation markers for floor levels and other relevant heights.

Elevations

L. Demonstrates ground connection/relationship with the ground.

M. Elevation markers for ground, roof, and other relevant heights.

N. Clear depiction of apertures, scale figures, and visible context (e.g. topography, vegetation).

O. Interior elevations: furniture and other scaling items, with background.

Renderings

P. Should, show the building from a variety of distances and in a variety of spaces

Q. Should have an intentional and consistent aesthetic (e.g., not Revit default)

R. Should clearly convey what is being depicted with captions and or reference plans.