Megafauna

Project for The Friesenhahn Cave Foundation

Studio Hours MWF - 1-6
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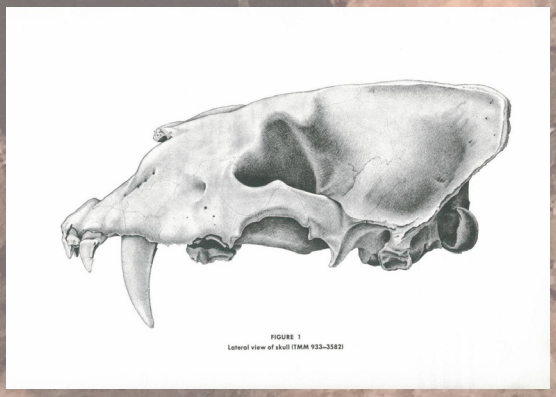
Studio Overview

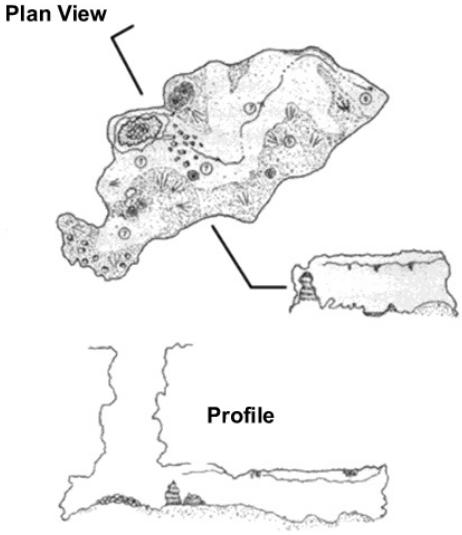
"Friesenhahn Cave is a fossil-rich one-room cave, once named Bulverde Cave and Bone Cave, located west of U. S. Highway 281 in north central Bexar County. The cave is a sinkhole formed in the region's karst topography. The only entrance, as documented since the earliest twentieth-century explorations, is a vertical twenty-eight-foot shaft. The floor of the cave is relatively flat, measuring thirty by sixty feet, with a seven-foot ceiling. Due to the wealth of bones and fossils discovered at the site, George Veni in *The Caves of Bexar County* described Friesenhahn Cave as "one of the most important paleontological sites in the United States." Concordia University, the institution that is the cave's steward, has reported that, besides the La Brea Tar Pits in Los Angeles, "no site in the United States has yielded a greater variety of significant Pleistocene (Ice Age) vertebrate fossils."

Paleontological excavations have started and stopped for over a century at the Friesenhahn Cave; at times, decades have passed between excavations. The first known description of the cave was a survey conducted in December 1915 by D. V. Schuchardt, a student of the Agricultural and Mechanical College at College Station (now Texas A&M University). He estimated that the floor of the cave was covered in three feet of fossil-bearing material. Schuchardt collected samples from eighteen species that were forwarded to the United States National Museum (now the Smithsonian's Arts and Industries Building) in Washington, D.C."

David Barklow, Texas State Historical Commission



Above: Homotherium skull found in the cave
Fullbleed: Original Cave entry now closed



The most famous remains found in the Pleistocene era cave are those of Homotherium or Scrimatar-Tooth Cats who lived in the cave more than 15,000 years ago and used it as their den. The cave's original formation, with its descending entry ramp leading deep into the earth, made for an ideal home for the Ice Age cats. The impressive feline remains are in the Texas Memorial Museum on the UT Campus. This 20,000 year old relatively-small single-room den is located in a site that is approximately four acres situated in the midst of the suburban sprawl of San Antonio that has built up around it within the last 20 years.

Above: Section and Plan view through ancient cat den
Bottom: Homotherium is thought to have preyed on baby mammoths which they would drag into the cave entry to feed to their kittens

The studio project will address conservation, education and research. The program for the studio will be a building approximately 15,000 SF and related site work containing a small, public Ice Age (Pleistocene) museum and educational facility,and, private paleontological archive and research facility for Concordia University's School of Natural and Applied Science. The new facility will house over 4,000 isolated teeth and bone of the more than 30 genera of Ice Age mammals, reptiles and birds that were found in the cave.

Above: Homotherium in the Texas Memorial Museum

Stages of Work

1. Light Study: (one week) A one week exercise using an interior physical model and photography to experiment with shaping natural light over the course of a day and creating tone and feeling.

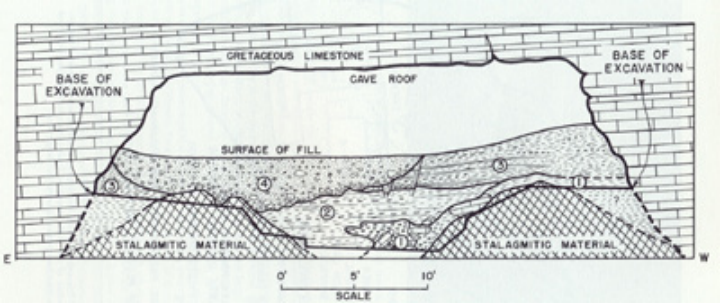
2. Site Study: (one week) Starting with a visit to the site and down below the ground into the Pleistocene cave, the second exercise will be to represent the site four-dimensionally, considering, at a minimum, the change in time 15,000 years ago (the end of the Pleistocene to the present suburban condition). We'll also take care of basic site documentation, base drawings and models for group use.

3. Conceptual Design (about 2 weeks) From here we'll follow a conventional project design methodology through iterative testing and play of overall project concepts and ideas through site design diagrams in plan and section and sketch models.

4. Schematic Design (about 2 weeks) This is about as far as a typical design studio goes. Iterative development of the basic conceptual design through plan, section, elevation and three-dimensional representation bringing structure and material resolution into the project.

5. Design Development (about 3 weeks) Here we'll work on a finer-grain resolution of the project with the development and integration of structure and material resolution through larger-scale sections, wall sections and details.

6. Project Documentation (about 4 weeks) For the remaining 4 weeks we'll continue to develop the design through the completion of phyiscal models and drawings sets and details.



Section through the cave showing the geologic composition of the site

Learning Outcomes

Students have been exposed to the following learning objectives in prior semesters and the level of expectation in these area is higher in advanced design studios.

• Design Composition Skills: Developed through three-dimensional architectural form and space, both exterior and interior; building envelope
• Design Integration Skills: Demonstrated through creative engagement with issues of materiality, structures, construction, and environmental system
• Site Analysis and Design: Developed through the creative engagement with relevant contextual; environmental and programmatic factors underlying the project
• Critical Thinking: Quality of conceptual and critical thought; learning from precedents; research skills
• Graphic Skills: Quality of presentation; clarity of communication; appropriateness of media strategy and level of skill displayed
• Collaborative and Leadership Skills: Demonstrated through the active engagement in all activities of the studio

Understanding and ability in research, design decision making processes, and integrative design are a focus of this studio. Additional learning outcomes for the Integrative Advanced Design Studio include:

• Research: Research practices undertaken and informing design process
• Integrated Decision Making: Problem identification; evaluation of issues spanning multiple systems and scales; analysis of solutions; application of evaluation and analysis to design decisions in complex architectural projects
• Technical Design and Documentation: Demonstrated through technically clear drawings addressing assembly of materials, systems, and components.
• Project Management: Demonstrated through effective team communication, work planning, and production delivery

Studio Culture

The School of Architecture believes in the value of the design studio model. Studio learning encourages dialogue, collaboration, risk-taking, innovation, and learning-by-doing. The studio offers an environment where students can come together to ask questions and make proposals, which are developed and discussed among classmates, faculty, visiting professionals, and the public-at-large. Studio learning offers intensive one-on-one instruction from faculty members, and provides the opportunity for each student to develop his/her critical thinking skills and spatial and material sensibilities. The design studio offers a synthetic form of education, where project-based learning becomes the foundation for developing an understanding of and commitment to the school's core values — broad-mindedness, interconnectivity, professionalism, exploration and activism — all in service of architecture's fundamental mission: to improve the quality of the built and natural environments.
https://soa.utexas.edu/programs/architecture/architecture-studio-culture

Design Conversations: Lecture Series

The School of Architecture offers a wide range of opportunities for students to extend the design conversations taken place in studios (Lecture Series, Goldsmith Talks, Exhibitions, etc). Students are encouraged to participate and be engaged. All students in this studio are expected to attend all the Jessen Lectures (three per semester by leading practitioners from around the world). The lectures and the ensuing discussions are an important component of intellectual engagement at the school.

Studio Course Grading Policy

While each design project contains certain quantifiable elements by which it may be evaluated, a significant portion of each grade is derived from a broader, more subjective set of issues. Student work will be evaluated according to its rigor and evolution over the semester. Grades are subject to deductions for late arrivals, absences, and late or incomplete work at the discretion of the instructor. Grading for an assignment is broken into four components, each of which is given roughly equal weight:

Pursuit: the consistent and rigorous development and testing of ideas.

• The ability to formulate a query or thesis and pursue a self-determined concomitant method of inquiry
• The ability to identify and implement various processual mechanisms (software, sketch drawing and models, etc.) in the development of the design
• Initiative as demonstrated in work ethic – Does the student do what is asked; go beyond what is asked; direct their own efforts; eager to produce the next iteration of the design?

Grasp: the ideas and understanding of the project at hand and integration of knowledge introduced in companion courses.

• A strong and clearly stated design objective
• Spatial acuity as demonstrated in plan – including reasonable disposition of programmatic elements – and sectional development
• Synthetic and critical thinking; the ability to holistically organize a project as demonstrated through creative engagement with issues of materiality, structures and construction, structural and environmental system integration, building materials and assembly, sustainable practices, etc. in support of the design objective
• Structural competence and material sensitivity as demonstrated in wall thickness, floor plates, and assembly

Resolution: of the design objective; the demonstration of competence, completeness, and finesse in the final design presentation.

• Quality of presentation; clarity of communication; appropriateness of media strategy and level of skill displayed through the work presented at all stages of the design process; technical documentation

Engagement: the active participation in studio activities, leadership, collaboration, group discussions and reviews.

A student must earn a letter grade of C or better in order for the course to count towards a degree in the School of Architecture and to progress in to the next studio. A letter grade of C- will not satisfy degree requirements.

Grade Descriptions

A/A- : excellent
Project surpasses expectations in terms of inventiveness, appropriateness, visual language, conceptual rigor, craft, and personal development. Student pursues concepts and techniques above and beyond what is discussed in class. Project is complete on all levels.

B+/B/B- : above average
Project is thorough, well presented, diligently pursued, and successfully completed. Student pursues ideas and suggestions presented in class and puts in effort to resolve required projects. Project is complete on all levels and demonstrates potential for excellence.

C+/C : average
Project meets the minimum requirements. Suggestions made in class are not pursued with dedication or rigor. Project is incomplete in one or more areas.

C-/D+/D/D- : poor
Project is incomplete. Basic grasp of skill is lacking, visual clarity or logic of presentation are not level appropriate. Student does not demonstrate the required competence and knowledge base.

F : fail
Project is unresolved. Minimum objectives are not met. Performance is not acceptable. Note that this grade will be assigned when students have excessive unexcused absences.

X : excused incomplete
Can be given only for legitimate reasons of illness or family emergency. Simply not completing work on time is not an adequate cause for assigning this evaluation. It may only be used after consultation with the Associate Deans' offices and with an agreement as to a new completion date. Work must be completed before the second week of the next semester in which you are enrolling, according to School of Architecture policy.

Methodology

Primary subjects of the studio include the design potentials of techniques of building and siting. Students will be expected to produce exquisitely crafted documents of their design proposals at the site, building, and detail scales, and the use of Revit for building information modeling will be required. General material and format considerations will be suggested by the instructor throughout the course, however, investigation and experimentation is strongly encouraged at all stages of production and design. In addition to digital production methods, portions of the studio process will include numerous physical models; students should equip their studio workspace appropriately.

Collaboration

Projects are developed in collaboration with a partner, and your performance will be evaluated collectively. You should be mindful of the give and take that is associated with a collaborative design process. If the relationship between you and your partner becomes strained in any way it is imperative that you bring such issues to the attention of your instructors. In addition to the specific relation you will have with you partner, a general spirit of collaboration amongst all members of the studio will be expected.

Attendance

Punctual and regular attendance is mandatory. Students are expected to work on their project in the studio. Active participation in studio readings and discussions is expected.
With three (3) unexcused absences, the student's final grade for the course will be lowered by a full letter grade. The final grade will be lowered by a full letter grade for each unexcused absence thereafter. Aside from religious observances, absences are only excused with written documentation of a medical issue or family emergency. The student is responsible for completing work missed due to excused absences and initiating communication with the instructor to determine due dates.
If a student is late (5 minutes after the start of class) three (3) times, it will be counted as one (1) unexcused absence. Students should notify the instructor prior to class if lateness or absence is known in advance. Students must notify instructors directly regarding lateness or absences; Asking a classmate to inform the instructor is not acceptable.

Religious Observances

A student shall be excused from attending classes of other required activities, including examinations, for the observance of a religious holy day, including travel for the purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. University policy requires students to notify each of their instructors as far in] advance of the absence as possible so that arrangements can be made. By UT Austin policy, you must notify the instructor of the pending absence at least fourteen days prior to
the date of a religious holy day. If you must miss a class, an examination, an assignment, or a project in order to observe a religious holy day, you will be given an opportunity to complete the missed work within a reasonable time after the absence.

Academic Integrity

Students who violate University policy on academic integrity are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the University. Since such dishonesty harms the individual, all students, and the integrity of the University, policies on academic integrity will be strictly enforced. Refer to the Student Conduct and Academic Integrity website for official University policies and procedures on academic integrity:
http://deanofstudents.utexas.edu/conduct/academicintegrity.php.

Care Program

Counselors in Academic Residence (CARE) Program places licensed mental health professionals within the colleges or schools they serve in order to provide better access to mental health support for students who are struggling emotionally and/or academically.

Laura Dannenmaier (LCSW) is the CARE Program Director and is the assigned CARE counselor for the School of Architecture. Faculty and staff may refer students to the CARE counselor or students may directly reach out to her.
Laura Dannenmaier | BTL 114B | (512) 471-3115
https://cmhc.utexas.edu/CARE_dannenmaier.html

Student with Disabilities

Students with disabilities who require special accommodations must obtain a letter that documents the disability from the Services for Students with Disabilities area of the Office of the Dean of Students

(471-6259 voice or 471-4641 TTY for users who are deaf or hard of hearing). This letter should be presented to the instructor in each course at the beginning of the semester and accommodations needed should be discussed at that time.
http://diversity.utexas.edu/disability/

Security, safety and the studio

The studio is an exceptional learning environment. Since it is a place for all, it necessitates the careful attention to the needs of everyone. All spraying of fixative, spray paint or any other substance should be done in the shop. Security is a necessary component for a studio that is accessible to you and your colleagues 24 hours a day, 7 days a week. Do not leave your studio without your studio key and do not leave your studio unlocked. Hold yourself and your studiomates accountable for the security of your shared space.

BCAL

Concerns regarding the safety or behavior of fellow students, Teaching Assistants (TA), or Professors can be reported to the Behavior Concerns Advice Line (BCAL): 512-232-5050. Calls can be made anonymously. If something doesn't feel right, it probably isn't. Trust your instincts and share your concerns.

Emergency Evacuation

In the case of emergency evacuation:
- Occupants of buildings on The University of Texas at Austin campus are required to evacuate buildings when a fire alarm is activated. Alarm activation or announcement requires exiting and assembling outside.
- Students should familiarize themselves with all exit doors of each classroom and building they may occupy. Remember that the nearest exit door may not be the one used when entering the building.
- Students requiring assistance in evacuation shall inform their instructor in writing during the first week of class. In the event of an evacuation, follow the instruction of faculty or class instructors.
- Reentry into a building is prohibited unless given instructions by the following: Austin Fire Department, The University of Texas at Austin Police Department, or Fire Prevention Services offices.
- Information regarding emergency evacuation routes and emergency procedures can be found at: www.utexas.edu/emergency.Emergency Evacuation

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E1

Light Study

Build a white museum board model with a uniform white interior space. The model should be open on one side or have a hole into which you can shoot the interior space. The final size is up to you. Create openings, visible and/or concealed to let light in and to shape the interior space and create scenes. Document the scenes through photography and a camera of your choice. Try to create feeling and atmosphere. An example would be the way a late summer afternoon shadow, that enters a room can change the tone and feeling of the space, even for a moment. Keep it rough.

Considerations

Change of time over the course of a day
Concealed source of light vs obvious light source
A range of light conditions from darkness to uniform and diffused brightly lighted space.
Consider the POV and how that effects the perception of scale.
Try to create the illusion of scale

Pin Up

Each group of two will present 12 - 8 1/2" x 11" images. Color photography maybe be used, however, you are to try to keep the images monochromatic. Use satin finish photo quality paper for the final pin-up. Do not present the models. They are only a tool to create the pictures.

James Casebere Vestibule 2 2018

James Casebere Two tunnels from right Vertical 1998