

Instructor: Andrzej Zarzycki

TULUM PAVILION: Sun Illumination Studies

Project: Design a *temporary* Cosmology Pavilion, a pavilion representing the year 2012. You can consider it the 'Pavilion of the End of the World', the 'Pavilion of Death', etc. Design your pavilion utilizing a modular and/or proportional and/or systematic approach. The structure may be designed using lightweight precast concrete and wood. The pavilion is to be a single story open air shelter. (Slight ramps and minor changes in height will be permitted.)

Activity Spaces:

There are three major programmatic components. The three spaces are to be 1,500 sf., 1,000 sf. and 500 sf. Each designer is to determine what sized space will be dedicated to each of the three activities. This decision must be based on their understanding of the Maya and the compositional category of dominant, subdominant and subordinate.

The spaces are listed below in no particular order:

Information/bookstore – location for information, maps, books, etc.

Art Gallery – location for exhibition of local temporary contemporary Mayan art

Cosmology Exhibit – location for permanent cosmology exhibit / space of contemplation and reflection

In addition to the three major programmatic components you must design an outdoor terrace area adjacent to the pavilion. This space will be used to as a meeting place for tour groups and visitors. You must provide shade for this outdoor space.

NOTE: Historic ruins may NOT be used for structural support.

Presentation requirements may include both a physical AND digital model. Evaluation will be based on the presence and extent of the design concept, the development of the concept into a coherent project, and the presentation of the project (including craft of model-making and drawing – *in all media used*). Specific images, models, and required process documentation may vary by section. Physical models must be photographed. Studio sections will be paired for intermediate reviews prior to Thanksgiving.

Using photometric data (physical units/lux) and Autodesk's 3DS Max, analyze lighting conditions of a space.

Objectives:

- To provide an opportunity to utilize a thoughtful, intelligent, and iterative design process over a longer period of time and in an architectural context.
- To continue the process of integrating consideration of the physical requirements of materials and construction into the design process.
- To continue the process of exploring the potential of digital design processes including the use of physical data for visualization/simulation.
- Provide additional practice in the craft of model building and drawing with various media and to begin to understand which modes of communication are appropriate at different stages of a design project; including both interim and final presentation stages.
- To provide exposure and opportunity to larger scale design projects
- To provide exposure to a project involving a known physical site
- To gain experience and exposure to designing within a specific environmental context – different from that typically found in northern New Jersey and to introduce considerations of sustainability in design.
- To provide exposure to a non-western culture and tradition
- To develop sensitivity to properties of construction materials such as color, translucency/ transparency/opacity, stability of form, etc.
- To consider issues of culture and history in the context of architectural projects.
- To consider issues of path and destination as part of a design project.
- To provide an opportunity to study the impact structure has on light and shadow for a sheltered space.
- To revisit the study of proportion and to understand the nuances between overall, inherent and comparative proportions as it relates to an architectural intervention.
- To continue to study the relationship between dominant, subdominant and subordinate forms within a composition.