

# Architecture Studio: 2<sup>nd</sup> Year Fall

Fall 2009, CMU, Arch #48-200, M/W/F 1:30-4:20  
Class Website: [www.andrew.cmu.edu/course/48-200](http://www.andrew.cmu.edu/course/48-200)

Coordinator: Kai Gutschow

Email: [gutschow@cmu.edu](mailto:gutschow@cmu.edu)

Off. Hr: M/F 12:00-1:00pm & by appt. in MM202

(9/9/09)

## PROJ. 2 -- GLASS PAVILION at 40°N

### MINDSET:

This project continues the exploration of “Light,” but now at the scale of a small building, and with a greater sense of materiality. The primary material will be glass, a natural complement to our study of light, but also primarily a non-structural material, so you will need to add structure and joinery in a deliberate, space-making manner. We will focus on the primary “elements of architecture” such as facade, entry, sequence of spaces, walls, thresholds, etc., and their potential to create rich experiences on many levels. There will be no particular context, rather a general position related to the sun to determine light, shadow, and heat conditions. The small scale will allow you to work at several different scales, and to develop each architectural element fully both in itself, and as part of an integrated whole.

### PROJECT:

Pittsburgh has been a world leader in the production of architectural materials: steel, glass, aluminum, paint, and all kinds of high tech products. As part of the country’s “stimulus plan”, the Pittsburgh Chamber of Commerce is commissioning architects to design pavilions to represent these Pittsburgh industries throughout the world. You have been commissioned to design a “Glass Pavilion” that should promote the glass industry in general (not any specific company), especially as it relates to architecture. It will be displayed at exhibitions, parks, and cities all over the world at approx. 40° north latitude. Although meant for exhibitions, the pavilion does not need to be “temporary” or easily disassembled. Your charge is to inform and inspire people about the possibilities of glass as a 21<sup>st</sup> century building material.

### THE SITE:

Assume a flat site, 50ftx75ft, oriented north-south, with no shadows from surrounding objects, at approx. 40° north latitude (prospective cities include Pittsburgh, New York, Lisbon, Madrid, Naples, Istanbul, Tashkent, Seoul, Beijing, Tokyo, San Francisco, Denver and Chicago). The pavilion should include a “landscape” around it, to orchestrate the first view, the pedestrian approach, the truck access, the ground level and materials, etc. You may design plantings, paving, and modest level changes. You may enter and/or exit from any side of the site or building.

### PROGRAM:

The Glass Pavilion can have a maximum footprint of 1000sf. It must include:

1. a separate entrance and exit, to allow for the easiest through-flow of people
2. an entry lobby, with reception desk
3. a small storage room, with truck dock to allow deliveries, and access to galleries
4. a main gallery or galleries (you choose the number and size). Your design must encompass both the architecture and the nature and content of displays on glass.
5. ample circulation space to ADA standards
6. an exit space with small book, brochure, and product sample distribution center

### DELIVERABLES & REVIEWS

A major goal of the 2<sup>nd</sup> year studio is to keep developing a robust design process in each student, which involves integrated research; iterative design; speculation & flexibility; synthesized scales & elements; multi-layer process; and effective communication. Above all you should integrate design and research about glass, both in the form of smaller, exploratory design exercises, and through the parallel analysis of other buildings and related ideas, both by yourself and in groups. In order to share results from studio to studio, and to encourage a more robust design process, higher quality, and more comprehensive “process work,” all students will be required to submit several pre-determined process drawings in the course of the project.

We will explore and communicate in various media, but a particular emphasis will be put on line drawings: sections, plans, detail drawings, axonometrics, and sectional perspectives. These will allow you to communicate clearly the horizontal layout and vertical spatial composition of your building in relation to the landscape, as well as details about how the walls and roof allow the flow of light and people in and out of your building.

Details of final deliverables will be announced after mid-review.



Bruno Taut, Gashaus



Mies, Farnsworth



Leonardo Glass Cube



Dale Chihuly



Monument Sq., Toilet, London



Kuma, Water/Glass House



SANAA, Toledo Glass Museum



Red Hse., Tacoma Glass Museum