ARCH 573: Technology & Performance Studio
Spring 2015
Instructor: Scott Murray

This graduate studio will be focused on how the architectural elements of structure and skin can work together to create unique, productive experiences of space and light in a high-performance public building. The vehicle for this study will be the design of a new 20,000 sq.ft. boathouse for the Rowing Team at the University of Illinois, incorporating spaces for training, boat storage and maintenance, and lake access. Our ultimate goal is to develop design proposals that are both conceptually and technologically rigorous. The structural development of projects will benefit directly from input by Prof. Marci Uihlein, who will serve as structures consultant for the studio.

Following initial analysis of site, climate, program, and precedent buildings, students will work in teams of two during the semester-long design project. Within each team, one student will have responsibility for leading the structural design effort, while the other student will have responsibility for leading the building-envelope design. Of course, the project will require close collaboration and integration of these elements throughout the design process.

The studio will emphasize mastery of technical principles related to high-performance buildings, as well as more intangible qualities such as spatial experience and the creation of unique architectural character, while also integrating comprehensive design principles of accessibility, life safety, and site design.

The studio process will be based on experimentation with structure, form, and enclosure, developed through iterative design proposals using large-scale detailed physical and digital modeling. This process will include regular desk critiques and informal pin-ups and discussion, in addition to the formal midterm and final reviews. Final projects will be presented in multiple media: detailed plans and large-scale sections, digital 3D modeling, physical models at a range of scales, and diagrams and details of structure and enclosure systems. One full-day field trip to Chicago is anticipated.