CourseNo: ARCHA4023_001_2012_3
Meeting Location: AVERY HALL 113
Meeting Time: R 06:00P-08:00P

Instructor Information:
Joshua D. Uhl
David A. Fano

Architectural Drawing and Representation 1

Computing in architecture has changed methods of representation, retooled construction techniques, and made communication of complex information instantaneous. In this state of ubiquitous computing, the architect is asked to not only grasp these new technologies but to shape them into the built environment. As the edge between the virtual and real become increasingly thin, the architect must not only be proficient in this interactivity, but tool it toward new ideas and potentials that are rife within this expanding territory.

Architectural Drawing + Representation investigates the concepts, techniques, and working methods of computer aided 'drawing' in architecture. Students will study the operative relationship between 2d and 3d data, exploring the reaches of their analytic and representational potential. While the class is a foundational course in architectural computing, it will build on the student's advanced ability to question, shape, and interrogate space and time.

The full-semester course will be focused on a project that is generated primarily with the use of Rhinoceros and 3dsMax. After the initial development of a virtual model, we will investigate tools to further the analytic and representational capacity of the data within the model. Studies will be in the form of drawings, physical models, images, and animations. There will be one assignment with 4 milestones. Each of these milestones will be posted on the class web page for grading.

As a companion to the course lectures, the class will have weekly Tutorial Sessions. Tutorialsare two hour 'hands-on' sessions led by a video tutorial with one-on-one assistance by the course TAs. The tutorials will cover the concepts and techniques covered in the course lecture. There will be tutorial assignments which will be covered only during the tutorial sessions. Tutorial times will be coordinated with your studio TA and will start the first week of classes.

Requirements for the course:
-Attendance at the lectures and tutorials
-Tutorial assignments
-Posting of all assignments and projects on course website
-Submission of archival quality images (2000x1500 pixels) and an animation

Grades will be based on the following criteria:
10% Completion of the Tutorial Assignments
10% Assignment 01A
20% Assignment 01B
20% Assignment 01C
40% Assignment 01D Final Images and Animation

Recommended Text, Blogs, and Links :
http://adr-gsapp-2012.ning.com/ (course website)
Architectural Geometry by Helmut Pottmann, Andreas Asperl, Michael Hofer, Alex Kilian
Digital Lighting and Rendering by Jeremy Birn
Inside Rhinoceros 4 by Ron K.C. Cheng