CourseNo: ARCHA4748\_001\_2013\_1 Meeting Location: AVERY HALL 600 Meeting Time: R 06:00P-08:00P

Instructor Information:
Joshua William Hugo Draper

Formworks - Build, Simulate, Cast, Visualize, Detail

Brief: In this iteration of Formworks, we will be working with "fabric formwork", one of the most exciting areas of dynamic formwork research. Students will produce fabric formed concrete curtain wall panels developing their work along 5 lines of inquiry: 1) Build the formwork and develop a parametric system to inflect and deform the fabric and concrete as it cures, producing non-repetitive but parametrically related panels 2) Simulate the formwork under the load of concrete using cloth simulation in nCloth or Kangaroo. Use the simulation to test different inflection systems and fabric deformations before casting 3) Cast panels while testing types of fabric, concrete and mold orientation 4) Visualize the shadow/light behavior of panels using a sun system with cloth simulation geometry vs. a timelapse video of the cast panel in actual sunlight 5) Detail the reinforcement and connection details for the cast panel

## **Previous Formworks Blogs:**

http://formworksspr12.blogspot.com

http://formworksfa11.blogspot.com

http://formworksspr11.blogspot.com

http://formworksfa10.blogspot.com

http://formworksspr10.blogspot.com

http://formworksfa09.blogspot.com

http://formworksspr09.blogspot.com

http://formworksfa08.blogspot.com

http://formworkssum08.blogspot.com