

MEDIA FOR DESIGN DEVELOPMENT: ALGORITHMIC MODELING

ARCH 423/523

Credit: 3CR

Term: Winter 2018

Instructor: John Leahy, jleahy@uoregon.edu, 503.412.3748

Schedule: Fridays, 9:00am-11:50pm

Location: Skidmore Computer Classroom (SKD 374), PDX

Enrollment Limit: 20 participants

Materials Cost: TBA (not to exceed \$50)

Objective:

This course investigates applying principles of generative design toward digital fabrication processes. It will utilize computational thinking as a methodology for proposing and analyzing design solutions. This method reconditions design constraints by decomposing, reorganizing and abstracting them into alternative systems for evaluating complex design problems. The concept of computational thinking has rapidly advanced within design professions from embracing the computer as a tool for arranging new spatial, functional, and material relationships and performing otherwise complicated tasks.

Participants will explore parametric scripting using visual programming as a technique for modeling and prototyping. Research will be focused on understanding computational systems and the opportunities they present when paired with processes of automation. Course work will experiment with testing concepts that provoke unique relationships between the virtual and material.

Content:

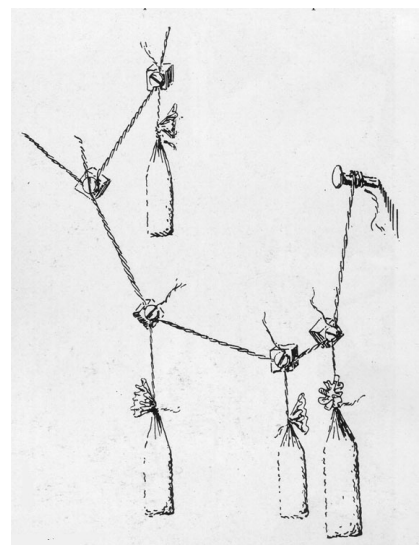
This course provides an introduction to modeling with Grasshopper in Rhino3D. It is recommended that participants be competent with Rhino3D, but it is not a prerequisite. Please contact John Leahy if you have questions or concerns.

Evaluation:

40% attendance/participation

40% reading/ research assignments

20% final project



Antoni Gaudi, drawing of catenary model