

Assignment 04 _ 3D Print Tessellations _ Generating Multiple Values (effects)



Project: Please note that this is a new assignment, it hasn't been assigned before. The image above does not represent the final outcome of this assignment. The outcome of the assignment is that each student will produce (3) square 100 mm x 100 mm 3D prints. Next week we will meet in Crown hall to display the 3D Prints as one giant tessellation of 3D Prints. Use Grasshopper to create a tessellated **Pattern** using one of the three pattern generation techniques covered in the course thus far. The pattern must use multiple values. Your pattern must be 3D Printable. From your Grasshopper script, produce (3) 100 mm x 100 mm 3D Prints.

Objective: Explore the relationship between digital and physical output through 3D printing. Learn to use the CoA Shop 3D Printers to prepare for the Midterm and Final assignments.

Process: Make a parametric component (Unit) then use one of the three pattern generation techniques to tessellate it with effect.

Schedule: Class-05 - Submit the deliverables listed below before the start of class-05:
We will meet in Crown hall to display the 3D Prints as one giant tessellation of 3D Prints.
We will document the event through photography,

Deliverables Produce (1) 11x17 sheet at 200 ppi with the following drawings
(3) 3D Views of the 3D Model showing (3) different parametric conditions (iterations)
(1) Grasshopper Definition
(3) 100 mm x 100 mm 3D Prints
Create a Separate PDF with (3) photos of your 3D Prints. Take professional photos of your 3D Prints using a plain white background with good lighting for shadows. Then use Photoshop, or other, to edit the photos as necessary. See the header image for reference.
Create (1) 11x17 PDF with (3) pages, (1) for each Photo. Each photo should be of the (3) prints together from different angles.

Submit: Submit all deliverables to the shared drive
Please save your files in a folder Firstname_Lastname in a sub folder A#
Please save your work as a PDF Firstname_Lastname_Assignment#

HOMEWORK ASSIGNMENTS MUST INCLUDE THE FOLLOWING:

- YOUR NAME
- ARCH 436 - Advanced Modeling
- SEMESTER / YEAR
- HOMEWORK ASSIGNMENT #