ARCH 497-02 Summer 2019

Assignment 01

Due Thursday, May 23

READ

Read up until page 42.

DO

Make a ‘complicated’ path in Rhino that consists of a ***single*** curve. This could either be a polyline or a polycurve(spline). Aim for complexity, as you have a tool to help you write the code. The curve should fit within a 22in x 30in rectangle. Use the grasshopper tool we coded today to produce valid gcode for the Precix CNC router.

MATERIALS

We will be plotting the toolpath on a piece of paper. You could just use the shop kraft paper or go for a nice piece of Arches or Rives. Up to you.

DELIVERABLES

You code saved with an extension of .NC saved to a flash drive. You will also need to document the finished drawing.

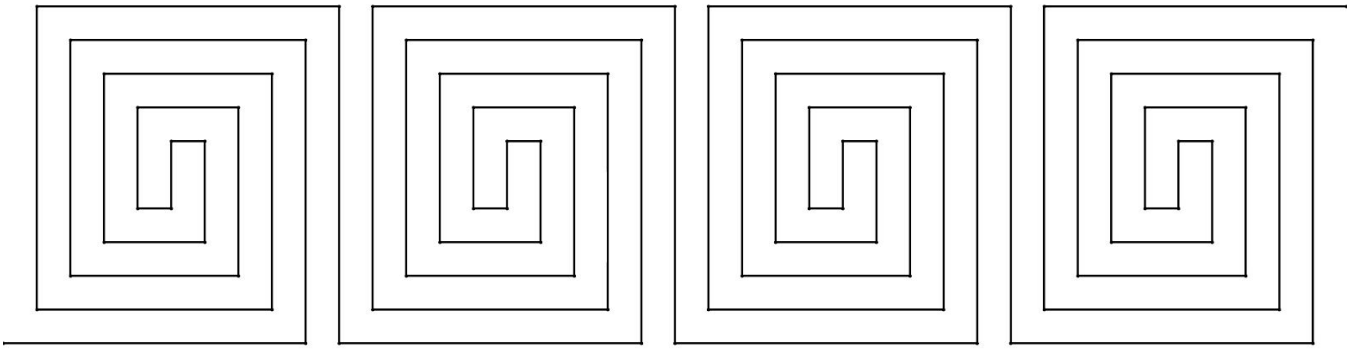
CONSTRAINTS

Our gcode formatter can only handle one line. We will find a way to make a more capable formatter in the future. Here, again is some beginning and end code, where all of your xy drawing code will go between the drawing comments.

```
(Your Code)
G0 G17 G20 G40 G80 G90
G0 X0.0 Y0.0
(S10000 M3)
G0 Z0.5
G1 Z0.0 F15.0
(Drawing code here)
```

(End drawing code)
G0 Z1.0
M5
M30

I’m planning on doing something like below, but smaller and more spirals. A repeating pattern can be arrayed to make more complicated assemblages of ‘cells’.



As always, let me know if you have any questions or concerns. Email me at:

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