MakeIt!

Class syllabus

Week 1 – How laser works, sample run of a wooden sign, Intro to design software – start a design, use line drawing tools, use layers, add text, save. Assignment – design your own sign.

Week 2 – How to send job to laser and set values for speed, power, material thickness, get student designed signs running, how to mask thicker wood and why to do it, design software – insert shapes, resize, make text wrap, import clip art. Assignment – design wooden Christmas tree ornament

Week 3 – How to use laser beam to position design on material, get ornaments running, making a 3D object that has parts that fit together, design software – importing your own photos, flip, mirror, and rotate designs, fill and raster. Assignment – design a desk sign, chess piece, or something else made of several parts that fit together.

Week 4 – get 3D designs running, design software – using color mapping to assign varying values and minimize laser time.

Week 5 – Using acrylic. Setting values for speed, power, material thickness. Design software—using the shape tool. Make a snap fit small box. Assignment – design an acrylic Christmas tree ornament.

Week 6 – get ornaments running, learn about web sites to get free designs already made up, Assignment – design an acrylic 3D object.

Week 7 – get acrylic 3D objects running, find plans for something you want to make out of wood or acrylic, import into our software and prep design for cutting.

Week 8 – Continue with imported design and get them all cut and assembled.

Week 9 – Using cardboard and paper, Setting values for cutting and for scoring. Assignment – design a piece of paper scherenschnitte,

Week 10 – get scherenschnitte running, making 3D objects out of cardboard. Assignment – design a 3D cardboard object

Week 11 – Using leather, values for cutting and scoring, design with holes for sewing it up. Assignment – design a key chain, wallet, or other small leather object.

Week 12 – get leather objects running, specialty materials – making rubber stamps, engraving on chocolate, working with cloth. Assignment – choose a project to make out of any material and start designing it.

Weeks 13 to end of semester – students work on individual self chosen projects. Lots of trial and error, and redesign of what doesn’t work. Design process practicum.