4.500 Introduction to Design Computing
Fall 2008

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A Proposal for a Writers Cabin

Nov 24, 2008

Final Presentation

This assignment is due Dec. 15th @ 1:00 PM in the AVT 7-431

Project

As architect you have completed the first pass of a design proposal to build a prototypical cottage for guests of the town of Concord. Your proposal for the project is due in the Mayors office Dec 17th in booklet form illustrating the glory of your design. Prepare a presentation for the town that demonstrates your visual thoughts and construction methods with 3D modeling, computer rendering and rapid prototyping. Your presentation should convince the town that you have designed a wonderful place on a historic site for any for less than $100,000 (the cost of a 400 square foot cabin).

Design

The goal of the project is to put forth a well designed prototypical cottage. The design should take advantage of form, space and light, it should be a great work of architecture. For final assignment your job will be to redesign areas of your cottage that received negative design and technical evaluation from class instructors. Do not feel that you need to redesign the entire cottage, review comments from old assignments and consider fixing areas that are weak in appearance or construction. If you decide to redesign the entire cottage start from the statement you wrote for the first design. Then make sure that design decisions match the goals in the statement; light, space and form.
Materials for Final Presentation

This assignment should satisfy three goals in the course:

- Presentation of a design idea with clarity (the purpose and design of the cabin)
- Demonstration of great design exploration – shows that you have the best solution
- Proof of technical understanding in design and construction

Upload to Stellar

One Word Document – should read like a project proposal

On Paper

a) One 24” x 36” Poster
b) The word document – in color & “stapled”
   (“No bindings One staple in the upper left hand corner only”)

Grading

The final project is 10% of your grade so do as much as you can. For this presentation you will be graded a maximum of 5 points for items 1-6 (30 points), 60 points for the model and 10 points for the over all presentation.
Image No.  Information on Poster & Paper Document

1  Description & Sketch
   - Name and Project Title
   - Design all of the pages******
   - Five points on why your cottage is great***
   - Make sure the text is legible (Try not to incorporate text into the image)

2  Axonometric Rendering

3  Site Drawing
4. Floor Plan Drawing

5. Elevation and or Section

6. Photo of 3D print
Laser Cut Model

1/8" masonite & paint

Build a laser cut model of one corner of the building. This model should convince the town that you have invented a way to produce the building. The model should include the following components

1 – Outer and inner walls of 1/8" masonite
2 – 1/8" studs in between the surfaces
3 – Siding attach by Friction/glue (assignment #8)

Download the model from "examples of construction modeling" on the class website. There you will find a file of the instant cabin and a presentation on paper. Demonstrated is an approach to digital fabrication for a small structure of ¾" plywood (1/8" masonite as a prototype). However the cabin is missing siding. You are required to cut a 6' section in x & y of the building for laser cutting. You can build the full height of the section or ¾ of the height. The full height might require 4 sheeets of masonite and 3 hours of cutting. The image below is example of the model as a full scale structure for CNC fabrication of plywood. You will need to scale the model to 1:6 in order to cut it of 1/8" masonite. The siding should be fabricated of 1/8" masonite modeled as ¾" plywood full scale.