



SPRING 2013

1210 Architecture Foundation II

ADDITIVE & SUBTRACTIVE CUBES IN A LANDSCAPE

2 Week Project

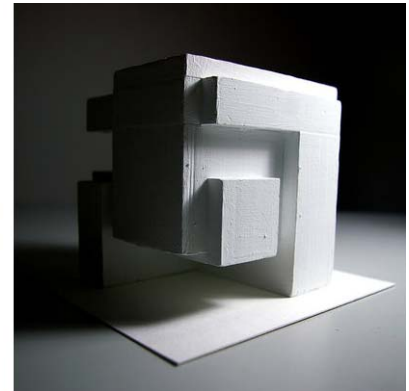
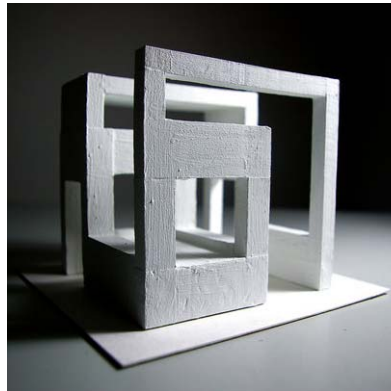
WEEK 01 - 02

DESCRIPTION

This project will challenge students to create relationships between objects of various sizes and material in a landscape. A total of 4 cubes will be conceptualized, designed, and crafted using both additive and subtractive modeling techniques. Two preliminary cubes will be created the first week and two final versions during week 2. In order to develop a conceptual catalyst for the cubes, students will use language to define complimentary and/or contradictory sets. The topographic site will then be modified/modified in order to enhance relationships between the various cubes, and to further reinforce overall ideas.

WORD LIST

Push/Pull
Solid/Void
Fast/Slow
Thick/Thin
Hard/Soft
Flexible/Rigid
Smooth/Rough
Fragile/Tuff
Prickly/Flat
Static/Active
Expand/Contract
Full/Empty
Turbulent/Still
Extrude/Intrude
Concave/Convex
Inflated/Deflated
Reflect/Absorb



GOALS

The goal of this project is to expose students to two techniques for defining volumes and space by using opposing words to guide the creation process. Two models will be created representing each word by using additive and subtractive techniques. Students will also learn how to manipulate contours and how the site plays an integral role in the design of place.

READING

Solids and Cavities in Architecture, S.E. Rasmussen, pp. 35-55.

LANDSCAPE

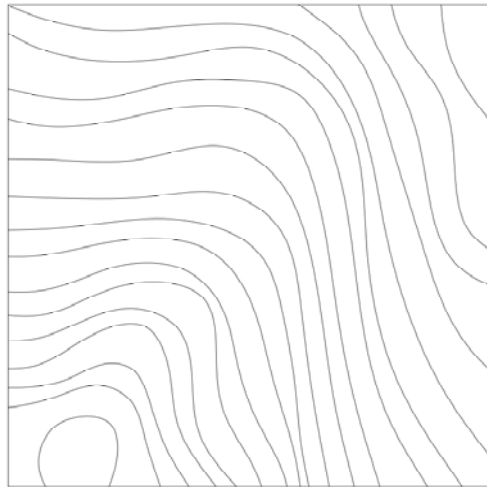
Careful consideration should also be given to the 12"x12" site to enhance the relationship between the two models. Also, it is up to each student to define the scale of the contours which can assist in enhancing the relationship of the models. Consider the material of the site, chipboard will result in the creation of a gently slope while foam core will create a much steeper landscape.

PROCESS

Cubes: Select two words that have either a complimentary or contradictory relationship. For example “explode/implode” have a contradictory relationship. Start by making two study models for each word, each model is limited to a size of 3”x3”x3”. At the same time create a preliminary site that works with the two models. After refining your study models and site, you are ready to make your final set in **bass wood**.

Site: The site can be made out of chipboard or foam core. Using the topographical plan cut the contours by hand. Note that the material you choose will determine the overall scale for your project. You should make a scale figure person to help you imagine how one would interact with your two models. Cut into your site, or add material to your site in order to further define the relationship between the objects and the landscape.

12"x12" Site



Draw: The final step is to document the design work.

1. Site plan
2. Two elevations
3. One section
4. One perspectives
5. One exploded axonometric of one of your cubes.

Thoughtfully scale and place these drawings on a 24”x36” sheet of double matte mylar (sometimes called drafting film). Drawings should be drawn in black ink and should use a variety of lineweights and linetypes. Include a graphic title, your name, the course name, course number, semester, and professor’s name. Each drawing should also be titled and scaled using architectural lettering.

MODEL SUPPLIES

1. Blue foam or Styrofoam
2. Chipboard, foam core
3. white glue
4. Bass Wood (sheets, dowels etc.)

SCHEDULE

Week 1

In-Class: Introduction to project & tools, demonstration of model making techniques

Homework: Define two complimentary/contradictory words to use as the basis of your design. Build a study model of each set of words. The additive models should be made of chipboard. The subtractive models should be cut from Styrofoam or blue foam. Also start work on a preliminary site.

Week 2

Due at Beginning of Class: 2 revised study models.

In-Class: Review of study models and drawings required. Start work on creation of final models and site.

Homework: Creation of final models, site and 24x36 presentation board.

NAME _____

EVALUATION

Your grade will be based on accuracy, care and craftsmanship employed in the construction of the model. Projects are evaluated based on their level of quality. A grade of "A" indicates an excellent level of quality. A grade of "A/B" and "B" indicate a good level of quality. A grade of "B/C" and "C" indicates a fair level of quality which is acceptable, but not notable. A grade of "D" indicates a poor level of quality which is unacceptable. A grade of "F" indicates a poor level of quality and an incomplete project.

PROJECT WEIGHT

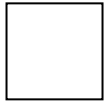
30% of Final Grade

ON-TIME

Preliminary Submittals wk 2 wk 3 wk 4 wk 5
Final Submittal wk 6

CUBE MODELS (70%)

CRAFT (30%)

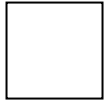


A B C D F

Model Quality & Accuracy

Volumes are free of excess glue
Cut edges are straight, clean, precise, or intentionally otherwise
forms are well executed
Contours are carefully cut and accurate

DESIGN (40%)



A B C D F

Meets Problem Constraints and Goals

Utilizes given constructs to create a sculpture made of 2 cubes
Proper building materials are used
The cubes are securely attached to contoured base

A B C D F

Achieves Design Excellence

The additive cubes exhibit intention informed by defining words
The subtractive cubes exhibit intention informed by defining words
Together the cubes form a well-conceived aggregation
The design exhibits a clear and pleasing quality

CUBE DRAWINGS (30%)

CRAFT (15%)



A B C D F

Drawing Quality & Accuracy

All/Most/Some/None lines are consistent in style, width and density
Lines exhibit intended orientation
Orthographic drawings are truly orthographic
Dimensions are precise
Drawings are to scale
Lettering is of high quality and consistent

DRAWING (15%)



A B C D F

Meets Constraints & Achieves Design Excellence

All/Most/Some/None presentation is clean, sharp, and precisely assembled
Contains one site plan, two elevations, one section, one exploded axonometric, and one perspectives
Overall page layout is creative and supports overall intent of design
Graphic decisions create a clear visual hierarchy