

Part 1

- Select one of your three $\frac{1}{4}$ **scale** conceptual models to develop
- Reimagine your concept being constructed out of dimensional lumber: post, beam, joist, decking, slat, etc.
- Develop a new study model (card stock) that illustrates the character of your reimagined wood structure at $\frac{1}{2}'' = 1'-0''$. [larger]
- By hand, draft plans, sections, and elevations of the developed structure at $\frac{1}{2}'' = 1'-0''$. [use 8.5" x 11" sheet for each detail]

Submit Part 1 in class Monday January 29th for discussion.

Part 2

- Construct a final scaled model of your structure using balsa or basswood at $\frac{1}{2}'' = 1'-0''$
- Draft digital plans, sections, and elevations of the developed structure at $\frac{1}{2}'' = 1'-0''$. [use 8.5" x 11" sheet for each detail]

Submit Part 2 in class Wednesday January 31st for discussion.

Each team is to investigate the firm or designer's built work: parks, institutional (museums, campuses, health care), residential, ecological, urban design, etc.

Find out what the firm's design philosophy is?

What are the firm's values relative to design?

How does your team interpret the firm's aesthetic?

How does the firm describe or present their aesthetic?

Investigate specifically the structures and materials the firm uses. Is there a consistency in the work or how the firm builds projects?

What is their attitude or position about materials relative to context and the built environment?

Each team shall prepare a **beautiful**, 20-slide presentation that articulates the essence of the firm's work. Each slide may include one word and should tell a story about the firm, their process, and design philosophy (the firm's design philosophy may be included as one of the 20 slides). We are interested in learning about how each firm integrates materials into their work. Is there a specific language, material palette, or inspiration that is unique or a trade mark of the firm. Is there a consistent thread that links the firm's body of work?

For Part_1 you will be evaluated on how beautiful, amazing, comprehensive, poetic, graphically and emotionally pleasing your presentation is. KISS- Keep-It-Simple-Stupid- I have found to be great advice for putting together slides. Also, checkout some of the online publications that are available on Issuu- they have a multitude of beautiful spreads and layouts that you can emulate or use as a guide or starting point. All presentations shall be submitted in PDF form on a single thumb drive for each team.

Each presentation shall be labeled the following way: **Designer's last name/ TA/ Team members last names (Example: MVVA/Rachel/Smith, Tyson, Anderson).**

Presentations will begin the week of February 19th. An official list will be provided in class Monday.

Part_1

Design and construct a formwork to receive a 4" x 4" x 4" plaster cube. Be sure that the formwork is rigid, stable and strong enough to undergo the "pour" and curing process. Forms should not warp, bend, stretch or shrink. Pay close attention to the material of the form, any liner, or how the form responds to the plaster as it cures. You want to be able to remove the form after it cures. Be sure the plaster has completely cured (is solid) prior to the start of class. We are looking for precise dimensions, smooth surfaces and crisp, square corners.

Part_2

Using the same 4" x 4" x 4" form or a new and refined one, adjust the formwork to create a negative space, within the 4" x 4" x 4" cube. That is, you will create a void within the cube itself through manipulation of the formwork. The negative space may be orthogonal (right angles). This will allow it to be modeled and measured with accuracy. You may also elect to use a free form or organic shaped negative space. The goal is to show control over the design, form and construction process. Keep your forms simple, remember to have an exit strategy that will allow the unwanted form pieces to release with ease from the material after it cures.

Create and design an additional 4" x 4" x 4" cube that has a texture embedded onto the surface of the cube. This should be easy to repeat and replicate in the future.

Lastly, design a third cube that has a function. That is, it may be a structure that can be occupied, it may be a device that holds or cradles another object. You determine the scale of the cube and how it is to be interpreted.

Part_3

Select one of the three cubes and develop that concept. Fine tune how the form is built to maximize craft, precision and execution of the work. Design a form strategy that is rigid and has a well thought out "exit strategy" for removing the form. You may consider using plaster of paris, mortar, concrete or experiment with a combination of the three. As part of your exploration and study, prepare a 3D model using the application of your choice. the 3D model should accurately resemble the finished product.

Our mid term review of Project_3 will be Wednesday, March 13 in Lee 3. The project deliverables are as follows:

1. First 4" x 4" x 4" cube study. [if you are not pleased with your first iteration, then build another one that is precise, sharp corners, smooth surface, etc.]
2. Exhibit the three iterations outlined in Part_2
3. Prepare a single 11" x 17" sheet (Portrait) that includes two elevations of your cube and 2 standard axonometric views of your cube. These will be black and white only, labeled and numbered. Include your name, TA, and project number on the sheet.
4. Present your final developed and refined cube and your individual form work. [this will likely be messy but needs to be a part of the exhibit] You must submit your form work to receive full credit.

Part 1

Using cardboard construct a model of the proposed topography and wall as it coordinates with the topographic plan. Include as much information as possible on the model. I.E. you may etch contour numbers, TW, BW, and slope arrows and indicators as necessary. If you wish to explore this exercise using the CNC machines you may. You may try 3D printing, but I do not recommend for this project.

Model @ 1/4"=1'-0"

Part 2

Using chipboard design and construct a model solution that incorporates a set of steps that will negotiate the grade change between the proposed top of slope and bottom of slope. Steps shall be a maximum of 6" deep and minimum of 12" wide. Additionally, incorporate a ramp the successfully negotiates the proposed top of slope and bottom of slope and meets standard ADA standards for an ADA accessible ramp. (8.3% max slope for 30')

Include Grading Plans and sectional studies for both the proposed step and ramp solution. Include all necessary spot elevations, top and bottom of wall annotation, top and bottom of ramp spot elevations and indicate the slope of ramp.

Plans, Sections and Models @ 1/4"=1'-0"

[Project 4 .pdf](#)

Part_1

Using cardboard as topography and Plaster Paris, concrete or mortar, individually or as a team (3 max per team) will design and construct a scaled model of the proposed topography and wall as indicated on the corresponding plan and section. Be creative and include as much information as possible on the model. Study the plan and section so that you design and build the wall being as efficient as possible. We are looking for smooth surfaces and tight fitting slopes. Come prepared with questions Monday.

All models to be constructed at $3/4"=1'-0"$.

Models, and formwork will be presented in class Monday, April 15th.

You may work in self organized groups with up to 3 people or you may work individually. Note, this project will take us through the remainder of the semester.

[Project_5.pdf](#)