Assignment 04

Physical Model

Course: Arch 565 - Advanced Computer Applications II
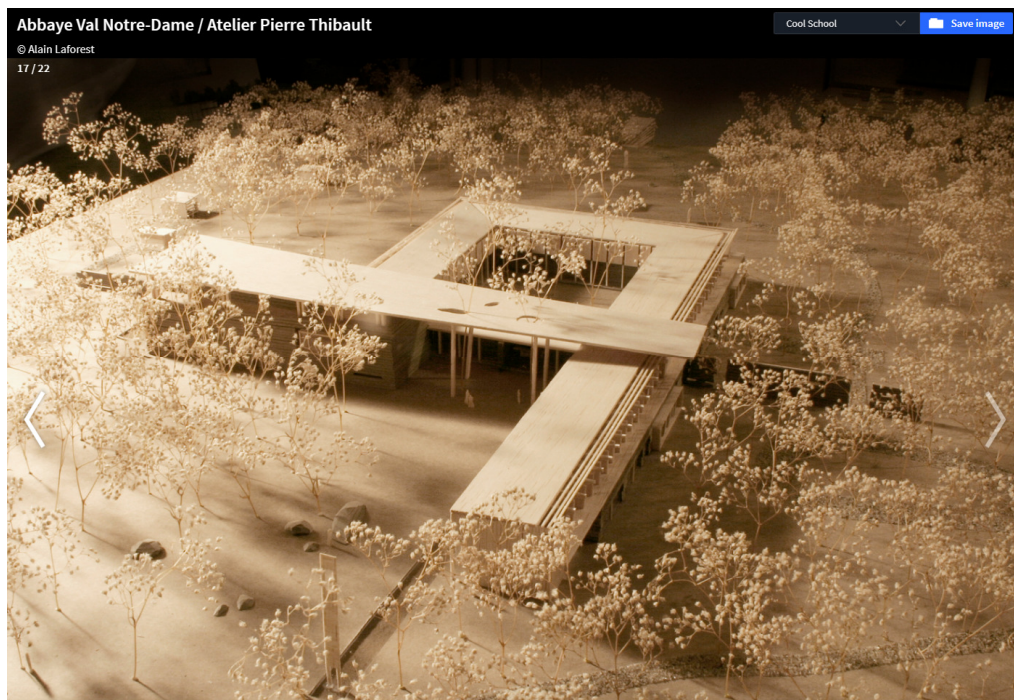**Due Date:** Thursday, November 13th
Weight: 25% of assignment grade

Overview

This assignment asks you to create a physical model that highlights a single architectural aspect of your ongoing design project. Rather than attempting to represent the entire project, the goal is to explore and communicate one key design element such as structural system, fenestration pattern, or relationship to site through material, scale, and craft.

Objectives

- Develop a physical model that communicates a focused architectural idea.
- Experiment with materials and techniques that best express the chosen aspect.
- Practice precision, scale, and craft in model-making.
- Strengthen the ability to use physical models as analytical and communicative design tools.

https://www.archdaily.com/806163/abbaye-val-notre-dame-atelier-pierre-thibault/58b32bc2e58ece4cd10004a2-abbaye-val-notre-dame-atelier-pierre-thibault-photo

Assignment Tasks

Select an Aspect

- Choose one of the following focal areas from your current design project:
    - **Structure** (e.g., column grid, trusses, load-bearing system)
    - **Fenestration** (e.g., façade openings, shading systems, transparency/opacity)
    - **Relation to Site** (e.g., topography, ground connection, orientation, context interface)

Design the Model

- Determine an appropriate scale (1:100, 1:50, or 1:20, depending on focus).
- Select materials that clarify the design idea (chipboard, basswood, acrylic, 3D printing, CNC/laser cutting, etc.).
- Model only the essential elements needed to highlight your chosen aspect.

Construct the Model

- Fabricate with precision and attention to craft.
- Ensure the model communicates clearly without relying on drawings or explanations.

Document the Process

- Photograph the finished model from multiple angles.
- Write a short (1-page) description of what the model highlights and how it relates to your overall project.

Deliverables

- One physical model emphasizing a chosen architectural aspect.
- Photographs of the model (minimum 3 views).
- 1-page illustrated explanation (PDF)

Evaluation Criteria

Clarity of Focus (40%) - Model communicates the chosen aspect effectively and unambiguously.
Craft & Precision (30%) - Materials, scale, and assembly demonstrate care and skill.
Design Insight (20%) - Model reflects thoughtful exploration of how the aspect relates to the larger project.
Documentation (10%) - Photographs and written explanation are clear, professional, and well-organized.

Grading Rubric (100 points total)

Criteria	Excellent (A: 90–100)	Satisfactory (B–C: 70–89)	Needs Improvement (D–F: <70)
Clarity of Focus (40 pts)	Model communicates the chosen aspect (structure, fenestration, or site relation) with exceptional clarity; concept is immediately understandable without explanation.	Model communicates the chosen aspect but with some ambiguity; concept is understandable with explanation.	Model fails to clearly highlight the intended aspect; unclear or confusing representation.
Craft & Precision (30 pts)	Materials and assembly are clean, precise, and professional; scale is appropriate and consistently applied.	Model shows reasonable effort but contains imperfections, rough cuts, or inconsistencies in scale.	Model is poorly crafted, messy, or incomplete; scale is unclear or misapplied.
Design Insight (20 pts)	Model demonstrates thoughtful exploration of how the chosen aspect informs or strengthens the overall project.	Model shows limited reflection on the design aspect's role in the project; exploration is surface-level.	Model lacks design insight; chosen aspect feels disconnected from the overall project.
Documentation (10 pts)	Photographs are well-composed and professional; written explanation is clear, concise, and reflective.	Photographs are adequate but lack refinement; written explanation is descriptive rather than analytical.	Photographs are poor or missing; written explanation is incomplete, unclear, or absent.