



LARC 1510: Basic Design I

Project 2: What's in a Tree?

Professor Browning

Fall 2023

Project Due Date: Monday, October 2nd (250 points)

Learning Objectives:

- Explore spatial organization and composition
- Understand form and how it influences design
- Apply the iterative design process
- Evaluate design alternatives
- Demonstrate high craft in everything that is made including models, drawings, and documentation
- Develop effective graphic communication and modeling techniques

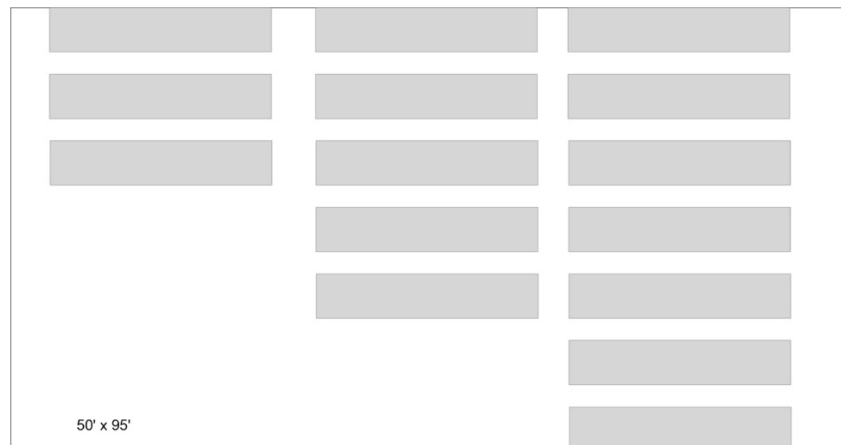
Step 1: Select and research 5 tree species listed below. Pay close attention to how the character of the tree is described; its mature height, width, structural attributes, character, branching habit, etc. On separate sheets of 9" x 12" heavy sketch paper illustrate how you would interpret the tree in plan view and draw a section of your tree illustrating the structural formation and habit indicative of your species at 1/8"=1'-0". You may consider the scale of the tree at 3/4 its typical mature height and width. On the same sheet draw the respective tree leaf, flower (if present) and fruit at 1:1 (actual size). Include the scientific name and the common name of each species. Note the scale on each drawing. Consider layout and composition of the tree, leaf and fruit on each sheet. Additionally, consider each sheet to be a part of a larger composition or series. All final drawings should be in ink.

<i>Acer buergerianum</i>	<i>Cladrastis kentukea</i>	<i>Malus x zumi</i> 'Calocarpa'
<i>Acer palmatum</i>	<i>Cornus Florida</i>	<i>Metasequoia glyptostroboides</i>
<i>Acer rubrum</i>	<i>Cryptomeria japonica</i>	<i>Parrotia persica</i>
<i>Acer saccharum</i>	<i>Fagus grandifolia</i>	<i>Pistacia chinensis</i>
<i>Aesculus pavia</i>	<i>Fagus sylvatica</i>	<i>Platanus occidentalis</i>
<i>Albizia julibrissin</i>	<i>Fagus sylvatica</i> 'Pendula'	<i>Prunus subhirtella pendula</i>
<i>Amelanchier arborea</i>	<i>Ginkgo biloba</i>	<i>Prunus x yedoensis</i>
<i>Asimina triloba</i>	<i>Gleditsia triacanthos</i>	<i>Quercus alba</i>
<i>Betula nigra</i>	<i>Halesia carolina</i>	<i>Quercus coccinea</i>
<i>Carpinus betulus fastigiata</i>	<i>Juglans nigra</i>	<i>Quercus phellos</i>
<i>Carpinus caroliniana</i>	<i>Koeleruteria paniculata</i>	<i>Quercus virginiana</i>
<i>Carya illinoensis</i>	<i>Lagerstroemia indica</i>	<i>Salix babylonica</i>
<i>Carya ovata</i>	<i>Liquidambar styraciflua</i>	<i>Taxodium distichum</i>
<i>Catalpa speciosa</i>	<i>Liriodendron tulipifera</i>	<i>Thuja occidentalis</i> 'Smaragd'
<i>Cercidiphyllum japonicum</i>	<i>Maclura pomifera</i>	<i>Ulmus parvifolia</i>
<i>Cercis canadensis</i>	<i>Magnolia grandiflora</i>	<i>Vitex agnus-castus</i>
<i>Chionanthus virginicus</i>	<i>Magnolia virginiana</i>	<i>Zelkova serrata</i>

Step 2: Design and construct one model of each of your 5 selected species using any material of your choice (wire recommended). Consider the material carefully so that you are crafting the character, habit and essence of the tree. If the species is deciduous the material used will likely be different from an evergreen or coniferous species. For deciduous species model the branching structure only. Each tree model will be constructed at $1/8" = 1'-0"$. The height and width of the tree should be approximately $3/4$ of its mature size.

Step 3: Choose one of your trees to explore further. Deriving inspiration from your tree, choose a word to guide your concept. Complete a concept map of your word.

Step 4: In the next step, you will create the elements for your design. Begin by creating your basemap. On an 11x17 piece of paper, create a $60' \times 100'$ rectangle at $1/16" = 1'-0"$. Then create a model base that is $50' \times 95'$ at $1/8" = 1'-0"$. You can make this out of foam core, wood etc. Afterward you will create 9 wooden blocks that are $5' \times 25'$ at $1/8" = 1'-0"$ (3rd dimension should be approximately 2-3' using wood (you will need to use the wood shop to complete this step). Below is a diagram to help you understand the dimensions of your materials.



Step 5: Your subsequent task will be a design intervention on your $50' \times 95'$ site using only trees of your one chosen species (you will need to create at least five more models of your chosen species) and 3, 5, 7 or 9 wood planks. In your project, the planks represent volume that can be either positive (a structure above the ground surface) or negative (a space subtracted below the ground surface). The planks may be used to create structures and space and may be used as organizational volumes. They may touch, but do not have to and they can be rotated in any direction. How you choose to combine your trees and planks should reflect your guiding concept.

You will initially create five concepts derived from your concept map that represent various forms of spatial organization. Each concept should include a conceptual diagram (11x17 drawing) and a photographic study where you utilize your model and scaled trees as an opportunity for exploration. Each concept should be accompanied by a critique where you outline the pros and cons of your design. These should be quick concept sketches that are loose and

exploratory (not renderings). You will select one concept to further develop. Provide a rationale for your selection.

Step 6: Your final step will be to create an illustrative master plan for your selected concept. The masterplan should be accompanied by 1 section, 1 perspective, 1 axonometric drawing, and 1 model.

Your final products will include

- 5 tree study boards (9" x 12")
- 5 model trees
- 1 concept statement
- 1 illustrative master plan
- 1 section
- 1 perspective
- 1 axonometric drawing
- 1 model

****All plans should include a title, labeled features, legend, north arrow, and graphic scale. Plans can either be drafted by hand or created on the computer. Utilize APA style for in-text citations and references.**

Project Calendar:

6-Sep	Weds.	Project 1 Pinup; Intro. to Project 2	
8-Sep	Fri.		TG_A2 Due; Daniel Tai Sketchup Workshop 11am - 1pm
		Week 4	
11-Sep	Mon.	Complete drawings of trees	Harry Harritos Workshop (1:00 - 2:15)
13-Sep	Weds.		
15-Sep	Fri.	Drawing & Model Pinup	TG_A3 Due; Paths: Nike and Morphosis workshop (11:15 - 12:05)
		Week 5	
18-Sep	Mon.	Concept map and 5 additional trees completed by beginning of class. Beginning working on model base and blocks.	Harry Harritos Workshop (1:00 - 2:15)
20-Sep	Weds.	Begin design intervention. Complete 5 concepts.	
22-Sep	Fri.	Finish 5 concepts. Select one to proceed w/ group pinup in afternoon session	TG_A4 Due
		Week 6	
25-Sep	Mon.	Create illustrative master plan	Harry Harritos Workshop (1:00 - 2:15)
27-Sep	Weds.	Complete illustrative masterplan Begin supportive graphics	
29-Sep	Fri.	Complete support graphics	TG_A5 Due; Watercolor Workshop (11:15 - 12:05)
		Week 7	
2-Oct	Mon.	Project 2 Pinup	

General Checklist

- Do you have a concept statement?
- Do all of your drawings have a title?
- Does your masterplan have a legend, north arrow, and graphic scale?
- Does your section include a graphic scale?
- Are all program elements and features labeled on your plan and section? If you were not present, would I be able to understand all of the elements of your design? (Label, label, label!)
- Have you checked for spelling and grammar mistakes?