LANDSCAPE DESIGN AND INSTALLATION
Lesson 20: DESIGN PROCESS

I. LESSON DESCRIPTION

Students learn the steps required in the landscape design process, then create drawings of a residential front yard. *Estimated time requirement for this lesson is 55 minutes.*

Curriculum Standards: National Agriculture, Food and Natural Resources (AFNR) Career Cluster Content Standards, National Council for Agricultural Education, 2009:

- AFNR LifeKnowledge® and Cluster Skills Standards (CS):
  - CS.01.01.01.a. Work productively with a group or independently.
  - CS.01.01.01.b. Demonstrate the ability to complete a task without assistance.
  - CS.01.01.01.c. Work independently and in group settings to accomplish a task.
  - CS.01.01.03.a. Exhibit good planning skills for a specific task or situation.
- Plant Systems (PS):
  - PS.04.01.01.a. Define design and identify design elements.
  - PS.04.01.02.a. Discuss the applications of art in agriculture/horticulture.

Student Learning Objectives:
After completing this class, students will be able to:
(1) List the goals of the two steps of the design analysis,
(2) Describe the evolution of a landscape design through four drawings, and
(3) Discuss some factors involved in selecting plant materials.

Instructional Method: Informal Lecture, Design Activity.

II. LESSON PLAN

Legend:

Text in normal face - Represents teacher's words.

Text in italic face - Represents suggestions for the teacher.

Interest Approach:

☐ By now we've become familiar with the variety of plants available, and we've seen 10 landscape design principles in action. How can we manage landscape projects, large and small, in an orderly fashion? How can we effectively marry our horticultural knowledge and design skills to renovate a landscape? We turn to all the landscape designers who have preceded us, and look for lessons learned and best practices.

☐ By following the sequence of steps in the landscape design process, we can meet customer requirements with solutions that suit the conditions found on the property, in the context of an inspiring design.

Relevancy:

☐ In this lesson we'll examine the steps in the process a designer follows for any landscape design project.

Learning Objectives:

☐ After attending this class, you will be able to:
(1) List the goals of the two steps of the design analysis,
(2) Describe the evolution of a landscape design through four drawings, and
(3) Discuss some factors in selecting plant materials.

☐ Now let's walk through a typical design procedure.

Instructional Methods

Lecture: 20 minutes estimated

☐ *Present the PowerPoint file, 20_DesignProcess_PowerPoint.ppt.*

Design Activity: 30 minutes estimated

☐ *Park the PowerPoint presentation on the last slide marked "Exercise". On the left of the screen is a perspective rendering of a landscape design; on the right is an architectural view of the front yard of the property.*

☐ Refer to the drawings on the PowerPoint slide. We're going to redo the front yard for your client, by completing 3 of the 4 drawings created during the landscape design process. For this exercise, we'll assume that we've completed the all-important client

interview and site analysis. The only requirement the client has for the front yard is to create a variety of situations for sun-loving and shade-loving plants.

☐ First create a Base Plan. Referring to the bird's-eye view of the plan on the right, sketch the existing permanent features of the front yard alone - the house and driveway in this case.

☐ Second, create the Bubble Diagram lightly with pencil; normally the Bubble Diagram would be drawn on tracing paper taped on top of the Base Plan, but for purposes of this exercise you can simply add the bubbles directly on your Base Plan. Just delineate certain areas with rough outlines for general purposes without thinking about specific plants. For example, add an ellipse for a groundcover bed, or a rough rectangle for a new walkway, or a circle for a large tree.

☐ Third, create a Draft Design. Either start with a fresh sheet of paper or erase your earlier markings as you convert the bubbles to develop spatial concepts. Look at each general-purpose balloon you created in the second step. Apply trees, shrubs, and plants in the appropriate areas; draw symbols of plants to represent the type and size of a plant at maturity. You won't select particular species of plants until Step Four. Specify pavement, other hardscapes (decks, patios, etc.) and garden accessories to provide more detail to the concept.

Summary:

☐ There's no time to draw the fourth and final step, the completed Landscape Plan. It will look similar to the Draft Design, except that particular species and hardscape materials will be shown. In a short time you've been able to experience one of the creative aspects of horticulture landscape design.

☐ Let's assume the landscape plan is completed, and move on to the next lesson how to install the plants and other landscape components.

OPTIONAL ACTIVITIES

- Shifting the view from the bird's-eye perspective directly overhead, to a front elevation view, students can sketch five-year and ten-year projections of their drawings. Students can refer to books on the growth rates of woody plants to appreciate the varying rates.
- Students can carry their design to the final Landscape Plan using computer software. They can choose from a full range of products, using the basic drawing features of Microsoft Word, to vector-based drawing programs such as Adobe Illustrator, to a variety of professional programs that they may be able to download as demo versions from the web. Available applications DynaScape include Eaglepoint "LANDCADD", Vectorworks "Landmark", Softdesk "PRO Landscape", and "DIG" (Design Imaging

Group). For a more thorough list of landscape design software applications available, find the April 15, 2005, issue of *American Nurseryman magazine*; on page 34 there's an article "Software Solutions" written by Madis Pihlak, an associate professor at Pennsylvania State University.

- Exercise the imaginations of your students by having them design one of the 18 holes in a miniature golf course. Assume the owner will have a large budget and access to skilled horticulturists who train dwarf trees and who wield shrubs into topiary forms of fantasy. Take the project to the extreme with water features, such as the surprise water jets that fired on guests in Renaissance gardens when they stepped on a hidden switch.

RESOURCES

Free publications:

- The Alliance for the Chesapeake Bay offers numerous choices of free materials on such topics as plant diversity, buffers, beneficial plants, integrated pest management, invasives, and other conservation issues. The landscape designs in Lesson 19: The Landscape Design Process was taken with permission from the Alliance, from the brochure "Homeowners' Guide to Designing Your Property." You can download the complete brochure and other publications by visiting http://www.alliancechesbay.org/ and following the link for "Publications".

Books:

- Several books and videotapes on the landscape business appear in a catalog from the publisher of one of the nursery trade journals, American Nurseryman Publishing Co., 223 West Jackson Boulevard, Suite 500, Chicago, IL 60606-6904, 1-800-621-5727, www.amerinursery.com

Websites:

- http://www.anla.org/ - American Nursery and Landscape Association.
- http://hort.ifas.ufl.edu/woody/planting/treeselectionintro.htm - Click on the link "Nursery Stock" to learn about issues like rootflare and selecting nursery stock.
- http://www.alca.org/ - Combined website of Associated Landscape Contractors of America and Professional Lawn Care Association of America.