HORT 335  LANDSCAPE STRUCTURES

Credits:  4
Prerequisites:  HORT 232 and one class on Autocad.
Time:  Lecture and Studio 9.00 am – 11.40 am Tuesday and Thursday
Instructor:  Zachary S. Johnson
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Office hours:  Wednesday 9.00 am – 10.00 am

Objectives
To become competent in the technical and aesthetic issues relating to the design and installation of outdoor structures applicable to the landscape development of residential and commercial properties.

Course Synopsis
Students will learn and explore to design, detail, estimate and draw landscape structures. Typical structures studied include decks, paving systems, retaining walls, fences, steps, benches, ponds/streams, lighting systems and overhead shade structures. Additionally students will learn how to design and build these structures with consideration to our natural resources.

You will be expected to know the following about each structure discussed in lectures:

a. Specific safety and functional aspects of the structure.
b. Components and their purpose.
c. How the components relate to each other.
d. Connection methods (bolts, screws, nails, hangers, glue, etc).
e. Proper sizes and quantities of components ensuring structural integrity.
f. Methods and sequence of fabrication.
g. Industry standards for quality (e.g. wood type and treatment, concrete types, brick density, metal type and gauge, finishes).
h. Graphic standards and conventions for drawing sections, elevations and details.

Methods
There will usually be 2 hours of lecture each week. The studio time will be spent preparing projects and construction documents for a variety of landscape structures.

Evaluation Criteria

Construction Drawings
1. Use of conventional graphic standards (dimensions, numbering, lettering, line weight, etc).
2. Correct methods of dimensioning for layout on the construction site.
3. Clarity. Easy to read and to make reproductions.
4. Structural integrity: Components designed and arranged such that the structure is stable, will perform the desired function effectively and has no safety issues.
5. Completeness: fully dimensioned- contains a complete schedule of quality standards and for all materials.
6. Graphics: Portfolio quality–clear, complete, accurate, prints well, good contrast, correct hierarchy of lines. Computer graphics shall be correctly proportioned and laid out for ease of interpretation. Computer generated axonometric (3-D) drawings are encouraged. Projects are expected to be completed using any number of computer drafting programs.
7. Challenging and creative- contains sufficient diversity, interest and depth to justify the time allotted- originality and uniqueness.
8. All projects to be completed as a craft-create beautiful projects; from title blocks to completed structures.
**Grading System**
Each assignment will be graded on a point system.
The total points available on each project will be stated on the problem statement.

Assignments- 65%
Tests/built projects- 30%
Class attendance and participation- 5%

**Policy Notes**
Attendance at workshops, project presentations and field trips is required. Absences at any of these times will result in an overall grade reduction of one level. Projects are due at the beginning of class on the days specified. Late assignments or projects will not be evaluated (graded). It is better to hand in partially completed work on time rather than miss the due date in order to finish your project. If you have a legitimate, documented excuse, extensions on projects will be granted and absences allowed.

If studio desks are used for any kind of light construction, they must be completely covered with cardboard. No cutting please.

Academic honesty- Cheating on tests, tracing examples on display, modifying someone else’s computer drawing, and use of another classmate’s design ideas on your own individual project is a serious matter and will result in a failing grade for that test or project. Group or team projects are an exception. Sharing of graphic techniques or computer skills is encouraged and is not considered dishonest. It is our expectation that you will honor the following statement throughout this course: I pledge on my honor that I have not received or given any unauthorized assistance on this academic work.

**Studio**
All work in process and design tools must be available at every studio review, critique and presentation.
University policy does not allow alcohol to be in any classroom. Lock all studio doors if you are the last person leaving.

**Required Materials**
Tape measure 25’
8 ½ x 11 pad of graph paper for field measurements
Utility knife with replacement blades
Elmer’s glue
Nail files
18” trace paper
Numerous drawing pens
Scales
Chipboard-060
Model building supplies

**Required Texts**
Sauter, David. *Landscape Construction, 2nd edition*

**Other Reading**
Harris and Dines. *Timesaver Standards for Landscape Architecture*
Walker, Theodore D. *Site Design and Construction Detailing*