HORT A116: DIGITAL DESIGN

Item	Value
Curriculum Committee Approval Date	10/16/2024
Top Code	010900 - Horticulture
Units	3 Total Units
Hours	126 Total Hours (Lecture Hours 18; Lab Hours 108)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S), • Pass/No Pass (B)

Course Description

This course provides an introduction to digital techniques while explaining the processes associated with describing and designing the landscape. In addition, this course guides the student through from their first impression of a site, through concept and schematic design and presentation to construction and site drawings, concluding with a case study that shows the final result. The designer needs to know about digital tools and use them at the various stages of a concept development. In the journey from concept to realization, it is important to have the right tools and methods of representation and use them in an intelligent and skillful way. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Use various applications to create, modify, and reproduce industry representation drawings.
2. Become fluent with the use of digital design tools and techniques and integrate these tools to create meaningful visual communication.
3. Demonstrate the ability to take a conceptual idea through final presentation.
4. Demonstrate the application and appreciation for the visual language.

Course Objectives

- 1. Expand personal knowledge base, further develop and broaden skill sets, and provide an opportunity to examine deeper personal values of design.
- 2. Evaluate various software and determine which software would be appropriate for various application
- 3. Identify the difference between a vector and raster drawings
- 4. Know the concepts of data management and how to assign, export and import data
- 5. Demonstrate how to render plans and edit images by integrating the various software programs
- 6. Create perspectives, section and animations using principles of 3D modeling
- 7. Integrate output from all applications into a final multimedia production as you would generate in a professional office
- 8. Examine visualization problems related to problem identification, research and information gathering, analysis, generation of alternative solutions, and prototyping.
- 9. Exemplify professional collegiality, respect and collaboration throughout the classroom.

Lecture Content

Basic AutoCAD Basic Commands Site Plan Floor Plan Elevations Details SketchUp Basic Commands Site Development Components and Groups AutoCAD to SketchUp Process Modeling Detailed Site Plan Custom Site Furnishings Terrain Modeling

Lab Content

Basic AutoCAD Basic Commands Site Plan Floor Plan Elevations Details SketchUp Basic Commands Site Development Components and Groups AutoCAD to SketchUp Process Modeling Detailed Site Plan Custom Site Furnishings Terrain Modeling

Method(s) of Instruction

- Lecture (02)
- Lab (04)

Instructional Techniques

Lecture using live demonstration by instructor. Informal one-on-one and small group instruction in studio. Quizzes Final Portfolio review.

Reading Assignments

Assigned from instructor handouts in both AutoCAD and SketchUp software applications. Students will have 1 hour of assigned reading weekly

Writing Assignments

Minor amounts of writing may appear in students projects, usually in the form of concept statements or field notes. Students will have 1-3 hours of assigned written exercises each week

Out-of-class Assignments

Preparation for quizzes, portfolio development. Minor amounts of writing may appear in students projects, usually in the form of concept statements or field notes. Students will have 1-3 hours of developing their CAD skills outside of classroom.

Demonstration of Critical Thinking

Demonstrate the ability to take a conceptual idea through final presenation.

Required Writing, Problem Solving, Skills Demonstration

Minor amounts of writing may appear in students projects, usually in the form of concept statements or field notes.

Eligible Disciplines

Architecture: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience. Ornamental horticulture (landscape architecture, floristry, floral design)...: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience.

Other Resources

1. Handouts assigned by instructor