

HORT 60L: VECTORWORKS 3-D

Foothill College Course Outline of Record

Heading	Value
Units:	3
Hours:	2 lecture, 3 laboratory per week (60 total per quarter)
Advisory:	HORT 45.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

Student Learning Outcomes

- Prepare a three-dimensional drawing of a site.
- Render a three-dimensional drawing of a site.

Description

Overview of three-dimensional drawing with Vectorworks related to landscape applications. Topics will include importing and constructing topography, drawing 3-D structures, inserting 3-D plants and amenities. Rendering, editing and presentation of 3-D landscape drawings.

Course Objectives

The student will be able to:

- Review 2-D Vectorworks basics.
- Prepare 3-D massing models.
- Fabricate and render 3-D massing models.
- Describe 3-D modeling.
- Create 3-D models from 2-D data.
- Render 3-D models.
- Print and export 3-D models.

Course Content

- Review of 2-D Vectorworks basics.
 - Basic drawing screen.
 - Basic 2-D drawing commands.
 - 2-D editing.
 - Drawing setup.
- Introduction to 3-D massing models.
 - Determination of proper model technique to draw.
 - Drawing with massing model commands.
 - Commands for rendering massing model sites.
- Fabrication and rendering of 3-D massing models.
 - Creating a massing model.
 - Rendering a massing model.
- Introduction to 3-D modeling.
 - Introduction to 3-D modeling commands.
 - Introduction to 3-D modeling editing.
 - Review of 3-D modeling setup.
- Creation of 3-D models from 2-D data.
 - Establishing base elevations of model.
 - Creating vertical elements of model.

- Inserting site elements into model.
- Rendering of 3-D models.
 - Creating wireframe of model.
 - Selecting proper rendering mode.
 - Applying textures to surfaces.
 - Selecting shading and lighting options.
- Printing and exporting 3-D models.
 - Saving models.
 - Exporting versions of model.
 - dwg extension.
 - pdf extension.
 - jpeg extension.
 - Printing models.
 - Small scale printing.
 - Large format printing.

Lab Content

- Practice drawing with CADD software.
- Completing assigned projects.

Special Facilities and/or Equipment

- Classroom with multi-media equipment.
- Classroom with current Vectorworks software installed.
- Lab with large format paper printing capability.

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

- Creating drawings using Vectorworks software.
- Completing assignments and tasks using Vectorworks software.
- Exporting and printing drawings.
- Writing comparative summary of available 3-D CADD software.

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

- Listening to lecture by instructor.
- Watching demonstration of software by instructor.
- Practicing drawing using software.

Representative Text(s) and Other Materials

Pickup, Johnathan. Vectorworks Landmark Tutorial Manual. 4th ed. Munich, Germany: Nemetschek Software, 2013. Although this text is older than the suggested "5 years or newer" standard, it remains a seminal text in this area of study.

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

- Reading 20-30 pages from assigned text weekly.
- Reading class notes supplied from instructor weekly.
- Researching 3-D CADD software.
- Writing comparisons of 3-D CADD software.

Discipline(s)

Ornamental Horticulture