

HORT 60J: SKETCHUP FOR LANDSCAPE DESIGNERS

Foothill College Course Outline of Record

| Heading | Value |
|------------------------------------|--|
| Units: | 3 |
| Hours: | 2.5 lecture, 1.5 laboratory per week (48 total per quarter) |
| Advisory: | HORT 40. |
| Degree & Credit Status: | Degree-Applicable Credit Course |
| Foothill GE: | Non-GE |
| Transferable: | CSU |
| Grade Type: | Letter Grade Only |
| Repeatability: | Not Repeatable |

Student Learning Outcomes

- Student will be able to prepare three dimensional landscape drawings using the sketchup program.
- Student will be able to render a prepared drawing using the textures, colors and attributes available in the sketchup program.

Description

An overview and application of Google Sketchup to three-dimensional rendering for the landscape designer. Emphasizing the basics of drawing setup, creation and editing, this course will show the designers how to turn their 2-D drawings into a presentation drawing that illustrates their ideas in photo-like rendering techniques. Importing and use of the three-dimensional tools available in Sketchup Make and Sketchup Pro will be included. Intended for students seeking a landscape design career or professionals upgrading their skills.

Course Objectives

The student will be able to:

- Exhibit an understanding of the use of three-dimensional software in landscape design.
- Prepare drawings using the Sketchup program.
- Render, edit and manipulate drawings using Sketchup.
- Export 3-D drawing into Layout 2-D version.
- Understand the cross-cultural applications for computer aided design.

Course Content

- Introduction to three-dimensional applications of Sketchup to landscape design
 - Overview of the software
 - Uses and practical applications based on drawing type
 - Limitations of the software and its application
- Using Sketchup to prepare landscape drawings
 - Drawing tools and their use
 - Inserting models into drawing
 - Navigating around the drawing
 - Segregating drawing elements using layers
 - Saving and opening drawings
- Rendering, editing, and manipulating drawings
 - Rendering
 - Adding material textures

- Adding shadows
 - Adding topography
 - Adding text and dimensions
- Editing
 - Changing drawing elements
 - Moving objects between layers
 - Drawing manipulation
 - Preparing components
 - Importing via 3-D warehouse
 - Making movies
 - Exporting images and movies
 - Printing and exporting drawings
 - Exploring symbol and command libraries within the program and on the internet
 - Using Layout
 - Saving drawing with proper settings to export
 - Choosing paper size and format in Layout
 - Adding information in Layout
 - Editing drawing in Layout
 - Identify the applications of the software to different types of projects and cultures
 - State where the program can be applied to landscaping in various regions of the country or world
 - Design/draw landscapes appropriate to the regional climate and culture

Lab Content

- Preparing designs using Sketchup
 - Drawing setup
 - Creating a drawing using three-dimensional drawing tools
 - Drawing rendering using materials and rendering settings
- Manipulating drawings using flyover and editing tools
 - Changing layers and classes
 - Adjusting views and perspectives of project
- Printing and exporting drawings

Special Facilities and/or Equipment

- Computer lab
- Google Sketchup software
- Windows software
- Student storage devices, such as thumb drives

Method(s) of Evaluation

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

- Preparing design projects using Sketchup software that demonstrate mastery of the program tools drawing layout.
- Skills demonstrations in laboratory setting using the tools described in lecture and presentations.

Method(s) of Instruction

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

- Lecture on the application of three-dimensional drawing for landscape design presentation.
- In-class presentation of drawing tools used to construct Sketchup drawings.

- C. Discussions with the instructor and classmates in group settings regarding the use of the program and resolution of problems with using the program.
- D. In-class preparation of drawings using the Sketchup software.

Representative Text(s) and Other Materials

Tal, Daniel. Google SketchUp for Site Design: A Guide to Modeling Site Plans, Terrain and Architecture. 1st ed. Hoboken, NJ: John Wiley and Sons, 2009.

Although this text is older than the suggested "5 years or newer" standard, it remains a seminal text in this area of study and no newer editions exist.

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

- A. Students will be required to work on drawing assignments outside of class, where they prepare 2-D and 3-D drawings recreating scenes and plans typically found in landscape design.
- B. Reading assignments will include reading approximately 5 pages per week.
- C. Lectures will address reading topics and experiences of instructor. Classroom discussion and demonstrations in support of lecture topics will be provided.
- D. Reading approximately 20-30 pages per week from assigned text.

Discipline(s)

Ornamental Horticulture