

# HORT 60J: SKETCHUP FOR LANDSCAPE DESIGNERS

## Foothill College Course Outline of Record

Heading	Value
<b>Units:</b>	3
<b>Hours:</b>	2.5 lecture, 1.5 laboratory per week (48 total per quarter)
<b>Advisory:</b>	HORT 40.
<b>Degree &amp; Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	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