

# HORT 91C: CONSTRUCTION COST ESTIMATING

## Foothill College Course Outline of Record

| Heading                 | Value   |
|-------------------------|---|
| Effective Term:         | Summer 2022                                   |
| Units:                  | 1   |
| Hours:                  | 12 lecture per quarter (12 total per quarter) |
| 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 assemble costs for project, including materials, labor overhead and other costs, into an estimate.
- Students will be able to calculate quantities of materials required for a landscape construction project.

## Description

Evaluation of project designs for the purpose of measuring material quantities, estimating labor requirements to install, and calculating overhead and related costs. Techniques for measuring, compiling, and interpreting data, and generating project cost estimates will be addressed.

## Course Objectives

The student will be able to:

- Read and interpret landscape construction drawings.
- Prepare material estimates from landscape construction drawings.
- Calculate labor costs for landscape projects.
- Compile cost estimates in standard formats for estimating and bidding.

## Course Content

- Reading landscape construction drawings and specifications
  - Understanding drawing scale, symbols, layout and formats
  - Reading specifications and identifying pertinent sections
- Preparing take-offs from landscape construction drawings
  - Measuring drawings
  - Performing geometric, linear and volume calculations
- Labor calculations
  - Estimating time for job completion based on historic data
  - Identifying situational circumstances which may alter time required for completion
- Presentation of cost estimates and bids
  - Completing bid forms
  - Preparing itemized cost estimates
  - Preparing lump sum estimates

## Lab Content

Not applicable.

## Special Facilities and/or Equipment

- Classroom with multi-media equipment.
- Computer lab with spreadsheet and/or cost estimating software.
- When taught online, on-going access to computer with email and internet access.

## Method(s) of Evaluation

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

- Written exams on cost estimating strategies
- Estimating costs for example projects
- Preparation of a cost estimating reference guide

## Method(s) of Instruction

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

- Lecture
- Field trips to construction offices
- Guest speakers
- Class discussions
- Assigned reading activities

## Representative Text(s) and Other Materials

Huston, Jim. *How to Price Landscape and Irrigation Projects*. 2014.

This text is a standard in the industry, even though it is over five years old.

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

- Reading assignments will include reading approximately 10-20 pages of assigned text each week

## Discipline(s)

Ornamental Horticulture