

**HORT 195.4 Course Outline as of Summer 2007****CATALOG INFORMATION**

Dept and Nbr: HORT 195.4 Title: LANDCADD: QUANTITY TKOFF

Full Title: LANDCADD: Quantity Takeoff

Last Reviewed: 2/5/2007

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.00	Lecture Scheduled	2.00	6	Lecture Scheduled	12.00
Minimum	1.00	Lab Scheduled	3.00	6	Lab Scheduled	18.00
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	30.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 24.00

Total Student Learning Hours: 54.00

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

**Catalog Description:**

Introduction to LANDCADD's new Quantity Takeoff module. Students will use the LANDCADD software program to calculate length, areas of square footage, and volumes, and to generate the bill of materials for a design.

**Prerequisites/Corequisites:**

Course Completion of HORT 195B ( or HORT 195.2) OR Course Completion of HORT 195C ( or HORT 195.3)

**Recommended Preparation:**

Course Completion of APTECH 46 ( or APTECH 56 or ENGR 56 or ENGR 22)

**Limits on Enrollment:****Schedule of Classes Information:**

Description: Introduction to LANDCADD's Quantity Takeoff module. Use computer assisted landscape drafting software to calculate length, areas of sq. footage, and volumes, and to generate the bill of materials for a design. (Grade or P/NP)

Prerequisites/Corequisites: Course Completion of HORT 195B ( or HORT 195.2) OR Course Completion of HORT 195C ( or HORT 195.3)

Recommended: Course Completion of APTECH 46 ( or APTECH 56 or ENGR 56 or ENGR 22)

Limits on Enrollment:

Transfer Credit:

Repeatability: Two Repeats if Grade was D, F, NC, or NP

## **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

<b>AS Degree:</b>	<b>Area</b>	Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>	Effective:	Inactive:

<b>IGETC:</b>	<b>Transfer Area</b>	Effective:	Inactive:
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<b>CSU Transfer:</b>	Effective:	Inactive:
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<b>UC Transfer:</b>	Effective:	Inactive:
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**CID:**

**Certificate/Major Applicable:**

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon successful completion of this course the student will be able to:

1. Set up a quantity takeoff (QTO) project.
2. Identify items on a plan utilizing tagging features found in the Quantity Takeoff module.
3. Accurately generate the bill of materials for a landscape plan.
4. Generate a cost estimate for a project based on current materials prices.
5. Manage a plant database.

### **Topics and Scope:**

#### **I. Quantity Takeoff**

- A. Setting up a project
- B. How to tag QTO item ID numbers to the plant database
  1. Tagging the QTO item ID's to the plant database
  2. Placing tags
- C. Utilizing Tagging Features
  1. Tagging individual items
  2. Tagging blocks
  3. Assign by areas
  4. Volume
  5. Modifying item ID numbers
  6. Removing tags
- D. Determining Tagged Items
- E. Methods for Selecting Items
  1. Selecting items for the bill of materials
  2. Generating the bill of materials

- F. Landscape Design Plant Palette
- G. Audit Plants
- II. Plant Database
  - Developing a plant database
    - A. Adding a plant
    - B. Modifying an existing item
    - C. Creating a user manual
    - D. Printing a report

**Assignment:**

1. Develop a materials takeoff list and cost estimate for a landscape plan.
2. Develop a materials takeoff list and cost estimate for an irrigation plan.
3. Develop a materials takeoff list for a hardscape plan.

**Methods of Evaluation/Basis of Grade:**

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because problem solving assessments are more appropriate for this course.

Writing  
0 - 0%

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

QTO & cost estimating projects.

Problem solving  
60 - 80%

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

None

Skill Demonstrations  
0 - 0%

**Exams:** All forms of formal testing, other than skill performance exams.

None

Exams  
0 - 0%

**Other:** Includes any assessment tools that do not logically fit into the above categories.

Attendance; participation; following instructions.

Other Category  
20 - 40%

**Representative Textbooks and Materials:**

LandCADD Training Manual, 2001.

Instructor prepared handouts.