# **Clackamas Community College**

Online Course/Outline Submission System

Show changes since last approval in red
Section #1 General Course Information
Department:Horticulture
Submitter
First Name: Renee Last Name: Harber Phone: 3294 Email: rharber
Course Prefix and Number: HOR - 225
# Credits:3
Contact hours
Lecture (# of hours): 33 Lec/lab (# of hours): Lab (# of hours): Total course hours: 33
For each credit, the student will be expected to spend, on average, 3 hours per week in combination of in-class and out-of-class activity.

Course Title: Principles of Arboriculture

# **Course Description:**

Management of trees in the landscape, including residential, commercial, and urban settings. Follows course materials prepared by the International Society of Arboriculture. Students study the value of trees, including ways that trees enhance the physical, aesthetic, economic, and psychological experiences of people. Prepares student for the ISA Certified Arborist Exam.

# Type of Course: Career Technical Preparatory

Is this class challengeable?

#### Yes

Can this course be repeated for credit in a degree?

No

Is general education certification being sought at this time?
No
Does this course map to any general education outcome(s)?
No
Is this course part of an AAS or related certificate of completion?
Yes
Name of degree(s) and/or certificate(s):Horticulture AAS, Landscape AAS
Are there prerequisites to this course?
No
Are there corequisites to this course?
No
Are there any requirements or recommendations for students taken this course?
No
Are there similar courses existing in other programs or disciplines at CCC?
No
Will this class use library resources?
No
Is there any other potential impact on another department?
No
Does this course belong on the Related Instruction list?
No
GRADING METHOD:
A-F or Pass/No Pass
Audit:Yes
When do you plan to offer this course?
✓ Winter
✓ Not every year

Is this course equivalent to another?

If yes, they must have the same description and outcomes.

#### No

Will this course appear in the college catalog?

#### Yes

Will this course appear in the schedule?

### Yes

### **Student Learning Outcomes:**

Upon successful completion of this course, students should be able to:

- 1. describe basic plant anatomy and physiology,
- 2. recognize the growth patterns of tree crowns, roots and trunks;
- 3. sketch compartmentalization of decay in trees,
- 4. list the common characteristics of urban soils relevant to tree health,
- 5. define engineered soils and assess their utility to tree health,
- 6. identify methods used to modify soil chemical, physical and biological properties;
- 7. recognize key factors to consider in tree selection,
- 8. describe the recommended tree planting recommendations for bare root, containerized and ball-and-burlap trees;
- 9. differentiate the advantages and disadvantages of bare root, containerized and balled in burlap trees relative to planting practices;
- 10. evaluate landscape installation practices at a new building site,
- 11. formulate an appropriate Tree Preservation Plan for 2 different trees,
- 12. list major construction impacts on trees and to evaluate methods to minimize these construction impacts to trees,
- 13. describe and be able to illustrate International Society of Arboriculture pruning guidelines for trees,
- 14. apply the Tree Hazard Assessment procedure to 2 different trees,
- 15. employ the systematic process to accurately diagnose a tree pest problem.

# This course does not include assessable General Education outcomes.

# Major Topic Outline:

- 1. Tree anatomy.
- Review of ISA tree list for Pacific Northwest.
- 3. Management of the tree's environment.
- 4. Soil relations, water management, fertilization.
- 5. Site considerations.
- 6. Tree selection, tree installation, tree establishment.
- 7. Construction management.
- 8. Pruning concepts and techniques.
- 9. Tree problem diagnosis.
- 10. Cultural maladies.
- 11. Pathogens.
- 12. Insects/mites.
- 13. Abiotic factors.
- 14. Hazard tree evaluation.
- 15. Plant health care.

Does the content of this class relate to job skills in any of the following areas:

Increased energy efficiency
 Produce renewable energy
 Prevent environmental degradation
 Clean up natural environment
 Supports green services

No

Percent of course:30%

First term to be offered:

**Specify term**: Winter 2016