

HORT A289: INSTALLATION OF RESIDENTIAL IRRIGATION SYSTEMS

Item	Value
Curriculum Committee Approval Date	12/08/2021
Top Code	010910 - Landscape Design and Maintenance
Units	1 Total Units
Hours	36 Total Hours (Lecture Hours 9; Lab Hours 27)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Open Entry/Open Exit	No
Grading Policy	Standard Letter (S), • Pass/No Pass (B)

Course Description

A hands-on experience with the installation of a residential irrigation system to include: materials lists, layout, trenching, gluing and fitting lines, sprinklers and nozzles, valve manifolds, and clocks. Emphasis on planning, layout, and time saving practical methods. To include one Saturday installation. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Successfully recognize components of irrigation plans and be able to use that knowledge to develop an accurate materials list.
2. Use the knowledge of sprinkler installation procedures and practices to stage and execute an irrigation installation.

Course Objectives

- 1. Demonstrate knowledge of the various names of irrigation materials and their uses.
- 2. Discuss irrigation plans to develop a materials list.
- 3. Explain the order of installation tasks.
- 4. Recognize ways to reduce unnecessary labor.
- 5. Explain troubleshooting basics for irrigation systems.

Lecture Content

Material parts, description and uses Making a material parts list from a irrigation plan Site evaluation and planning Trenching to minimize labor Layout of materials Building valve manifolds Gluing pipe Sprinkler heads and swing joint assembly Pressurizing a system Wiring an setting an irrigation clock Troubleshooting for problems

Lab Content

Site evaluation and planning Trenching to minimize labor Layout of materials Building valve manifolds Gluing pipe Sprinkler heads and swing

joint assembly Pressurizing a system Wiring an setting an irrigation clock Troubleshooting for problems

Method(s) of Instruction

- Lecture (02)
- Lab (04)

Instructional Techniques

Lecture, Presentations, Demonstrations, Hands-on Activities, Guest Speakers, Cooperative Learning

Reading Assignments

Irrigation handouts to be read each week - 1 hr.

Writing Assignments

Completion of written assignments discussing in-class irrigation problems in a neat, workmanlike manner that meet safety and industry standards - .5

Out-of-class Assignments

Research the newest technologies through Internet searches - .5

Demonstration of Critical Thinking

Quizzes, Exams, various assignments, class participation

Required Writing, Problem Solving, Skills Demonstration

Quizzes, exams and written assignments

Eligible Disciplines

Ornamental horticulture (landscape architecture, floristry, floral design)...: Any bachelor's degree and two years of professional experience, or any associate degree and six years of professional experience.

Other Resources

1. Handouts to be provided and distributed by the instructor.