HORT 189 Course Outline as of Spring 2016

CATALOG INFORMATION

Dept and Nbr: HORT 189 Title: LANDSCP DRAINAGE BASICS
Full Title: Landscape Drainage Basics
Last Reviewed: 10/24/2011

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	1.50	Lecture Scheduled	1.50	17.5	Lecture Scheduled	26.25
Minimum	1.50	Lab Scheduled	0	6	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	1.50		Contact Total	26.25
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 52.50 Total Student Learning Hours: 78.75

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:
This course covers common grading, drainage, and erosion control methods related to residential landscape sites. Discussion includes surface and subsurface systems as well as the basics of residential erosion control.

Prerequisites/Corequisites:

Recommended Preparation:
Eligibility for ENGL 100 or ESL 100

Limits on Enrollment:

Schedule of Classes Information:
Description: This course covers common grading, drainage, and erosion control related to residential landscape sites. Discussion includes surface and subsurface systems as well as the basics of residential erosion control methods. (Grade or P/NP)
Prerequisites/Corequisites:
Recommended: Eligibility for ENGL 100 or ESL 100
Limits on Enrollment:

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

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	**Area**	Effective:	Inactive:
CSU GE:	**Transfer Area**	Effective:	Inactive:
IGETC:	**Transfer Area**	Effective:	Inactive:

CSU Transfer:	Effective:	Inactive:
UC Transfer:	Effective:	Inactive:

CID:

Certificate/Major Applicable:
Both Certificate and Major Applicable

COURSE CONTENT

Outcomes and Objectives:
Upon successful completion of this course, the student will be able to:
1. Develop a design and describe installation specifications for:
   a. Swale
   b. French Drains
   c. Surface Drains
2. Describe basic soil and water relationships.
3. Analyze water movement within differing soils.
4. Assemble equipment and material specifications and select appropriate materials for a variety of drainage systems.
5. Write installation specifications and standards for a variety of types of installation projects.
6. Select sloped surface stabilization methods for specified degrees of slope.
7. Describe site grading processes for a variety of conditions.

Topics and Scope:

I. Soil and Water Relationships
II. Site Grading
III. Site Drainage
   A. Surface systems
   B. Subsurface systems
IV. Equipment and Materials
   A. Selection
   B. Specifications
V. Installation
   A. Types of projects
   B. Installation sequence
   C. Testing and evaluation of system
VI. Erosion Control
   A. Perimeter erosion

B. Surface erosion
C. Channel erosion

VII. Special Situations
A. Slope ratios
B. Grade tolerances

Assignment:

1. Weekly reading assignments with corresponding worksheet calculations
2. Final site design project with installation specifications
3. Write installation specifications
4. Participation in field activities

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.

Worksheets. Installation specifications	Writing 20 - 30%

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

Worksheets, final project: site design project.	Problem solving 40 - 50%

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.

Participation in field actvities	Other Category 20 - 30%

Representative Textbooks and Materials:
California Landscape Standards. CLCA, Sacramento, CA. Current edition.
Sauter, David. Landscape Construction. Delmar, 2010.
Instructor prepared materials