

# ENVIRONMENTAL HORTICULTURE & DESIGN (HORT)

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## HORT 10 • ENVIRONMENTAL HORTICULTURE & THE URBAN LANDSCAPE

<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU/UC
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Environmental horticulture encompasses the planning, design, construction, and management of the urban landscape. Relevant topics include ecosystem restoration and management, landscape ecology, sustainable landscape management, sustainable use of natural resources, urban horticulture, and urban landscape design. This course is intended for students in the Environmental Horticulture & Design program but members of the public and professional community are invited to enroll.

## HORT 15 • ORIENTATION TO ENVIRONMENTAL HORTICULTURE

<b>Units:</b>	4
<b>Hours:</b>	3.5 lecture, 1.5 laboratory per week (60 total per quarter)
<b>Advisory:</b>	Not open to students with credit in HORT 50A.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Area III: Natural Sciences
<b>Transferable:</b>	CSU/UC
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Survey of the many facets and component sciences of environmental horticulture. Exploration of the multitude of career options available in the green industry. An introduction to the vocabulary of the environmental sciences, including the terminology used in the identification of plants. Foundations of plant science, such as plant structure, plant growth, and the environmental needs of plants.

## HORT 21 • PLANT MATERIALS I

<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Advisory:</b>	Completion of or concurrent enrollment in HORT 15 strongly recommended; not open to students with credit in HORT 51A.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU/UC
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Identification, taxonomy, habits of growth, and cultural and environmental requirements of plants grown in California. Emphasis on the identification, use, and maintenance of plants commonly used in the landscaping and gardening industry. Plants are observed on campus and at off-site locations. This is the first of two plants courses covering the master plant list.

## HORT 22 • PLANT MATERIALS II

<b>Units:</b>	3
<b>Hours:</b>	3 lecture per week (36 total per quarter)
<b>Advisory:</b>	Completion of or concurrent enrollment in HORT 15 strongly recommended; not open to students with credit in HORT 51B.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU/UC
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Identification, taxonomy, habits of growth, and cultural and environmental requirements of plants grown in California. Emphasis on the identification, use, and maintenance of plants commonly used in the landscaping and gardening industry. Plants are observed on campus and at off-site locations. This is the second of two plant courses covering the master plant list.

## **HORT 23 • PLANT MATERIALS: CALIFORNIA NATIVE PLANTS**

**Units:** 2  
**Hours:** 2 lecture per week (24 total per quarter)  
**Advisory:** Completion of or concurrent enrollment in HORT 15 strongly recommended; not open to students with credit in HORT 51D.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU/UC  
**Grade Type:** Letter Grade Only  
**Repeatability:** Not Repeatable

Identification, taxonomy, habits of growth, cultural and environmental requirements of plants native to California landscapes. Emphasis on a wide variety of native species including trees, shrubs, ground covers, and herbaceous plants. Plants are observed via media and physical observation.

## **HORT 24 • PLANT MATERIALS: GROUND COVERS & VINES**

**Units:** 2  
**Hours:** 2 lecture per week (24 total per quarter)  
**Advisory:** Completion of or concurrent enrollment in HORT 15 strongly recommended; not open to students with credit in HORT 51E.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU/UC  
**Grade Type:** Letter Grade Only  
**Repeatability:** Not Repeatable

Identification, taxonomy, habits of growth, cultural and environmental requirements of woody and herbaceous ground covers and vines grown in California. Emphasis on the use and maintenance of evergreen and deciduous plants used as ground covers, vines, or espaliers in ornamental landscapes. Plants are observed in class, on campus, and at off-site locations.

## **HORT 25 • PLANT MATERIALS: BAMBOOS & PALMS**

**Units:** 2  
**Hours:** 2 lecture per week (24 total per quarter)  
**Advisory:** Completion of or concurrent enrollment in HORT 15 strongly recommended; not open to students with credit in HORT 51F.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU/UC  
**Grade Type:** Letter Grade Only  
**Repeatability:** Not Repeatable

Identification, taxonomy, habits of growth, cultural and environmental requirements of bamboos and palms grown in California. Emphasis on the use and maintenance of these two categories of monocots, each with markedly different forms. Plants are observed via media and physical observation.

## **HORT 26 • PLANT MATERIALS: PERENNIALS & ANNUALS**

**Units:** 2  
**Hours:** 2 lecture per week (24 total per quarter)  
**Advisory:** Completion of or concurrent enrollment in HORT 15 strongly recommended; not open to students with credit in HORT 51H.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU/UC  
**Grade Type:** Letter Grade Only  
**Repeatability:** Not Repeatable

Identification, taxonomy, habits of growth, cultural and environmental requirements of herbaceous plants grown in California. Emphasis on the use and maintenance of significant perennial and annual species with significant features such as flower and foliage displays. Plants are observed via media and physical observation.

## **HORT 30 • HORTICULTURAL PRACTICES: SOILS**

**Units:** 3  
**Hours:** 2 lecture, 3 laboratory per week (60 total per quarter)  
**Advisory:** Completion of or concurrent enrollment in HORT 15 recommended; not open to students with credit in HORT 52A.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU/UC  
**Grade Type:** Letter Grade Only  
**Repeatability:** Not Repeatable

Fundamentals of soil science, including examination of soil formation, physical and chemical properties of soil, relationships between soil, water and plants, and biological factors of soil. Examination of soil samples and interpretation of soil reports and surveys. Basics of plant fertility requirements and soil related topics, such as composting, environmental issues, and soils in construction.

## **HORT 31 • HORTICULTURAL PRACTICES: PLANT PROPAGATION**

**Units:** 3  
**Hours:** 2 lecture, 3 laboratory per week (60 total per quarter)  
**Advisory:** Completion of or concurrent enrollment in HORT 15 strongly recommended; not open to students with credit in HORT 52B.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU/UC  
**Grade Type:** Letter Grade Only  
**Repeatability:** Not Repeatable

Principles of plant propagation with an emphasis on techniques that are used in the nursery and greenhouse industries. Seeds, cuttings, grafting techniques, and the separation and division of specialized structures.

## **HORT 40 • LANDSCAPE DESIGN: GRAPHIC COMMUNICATION**

**Units:** 4  
**Hours:** 3 lecture, 3 laboratory per week (72 total per quarter)  
**Advisory:** Not open to students with credit in HORT 60A.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU/UC  
**Grade Type:** Letter Grade (Request for Pass/No Pass)  
**Repeatability:** Not Repeatable

An introductory survey of the basic principles of design communication, landscape graphics, and design process. Graphic mediums and tools, graphic vocabulary, graphic skills, reprographic techniques, plan reading, and presentation skill development. The application of lines, symbols, and lettering to create typical landscape drawings.

## **HORT 45 • VECTORWORKS FOR LANDSCAPE DESIGNERS**

**Units:** 3  
**Hours:** 2 lecture, 3 laboratory per week (60 total per quarter)  
**Advisory:** HORT 40 and a basic understanding of the operation of computers is recommended; not open to students with credit in HORT 60E.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU/UC  
**Grade Type:** Letter Grade Only  
**Repeatability:** Not Repeatable

Introduction to Vectorworks 2D software for computer aided design and drafting (CADD), specifically for landscape related applications. Focus on development of basic command skills, including 2-D drawing, editing, creation of layers, plant placement tool, and exporting to other programs and as a PDF for printing. 3-D CADD drawing is covered in a different course. Vectorworks software is utilized in this course.

## **HORT 52C • HORTICULTURE PRACTICES: PLANT INSTALLATION & MAINTENANCE**

**Units:** 4  
**Hours:** 3 lecture, 3 laboratory per week (72 total per quarter)  
**Advisory:** Completion of or concurrent enrollment in HORT 15 strongly recommended.

**Degree and Credit** Degree-Applicable Credit Course

**Status:**

**Foothill GE:** Non-GE

**Transferable:** CSU

**Grade Type:** Letter Grade Only

**Repeatability:** Not Repeatable

Horticultural principles and practices for management of plants and gardens. Proper selection and maintenance of trees, shrubs, and ground covers. Fine gardening techniques used by landscape gardeners. Transplanting and planting containerized and boxed plant material. Preparation of planting areas and post-planting care of landscape plants. Techniques for pruning of various species. Operation of equipment and tools used in gardening. Managing pests in the landscape. Troubleshooting irrigation equipment. Surveying requirements for landscape maintenance business.

## **HORT 52G • HORTICULTURAL PRACTICES: TURFGRASS MANAGEMENT**

**Units:** 3  
**Hours:** 2 lecture, 3 laboratory per week (60 total per quarter)  
**Advisory:** Completion of or concurrent enrollment in HORT 15 strongly recommended.

**Degree and Credit** Degree-Applicable Credit Course

**Status:**

**Foothill GE:** Non-GE

**Transferable:** CSU

**Grade Type:** Letter Grade Only

**Repeatability:** Not Repeatable

Turf identification and planting techniques. Turf maintenance and management practices for golf courses, athletic fields, parks, and areas surrounding commercial buildings and private residences. Examination of soils, irrigation, weeds, diseases and pests as they pertain to turfgrass.

## **HORT 52H • HORTICULTURE PRACTICES: INTEGRATED PEST MANAGEMENT**

**Units:** 3  
**Hours:** 2 lecture, 3 laboratory per week (60 total per quarter)  
**Advisory:** Completion of or concurrent enrollment in HORT 15 strongly recommended.

**Degree and Credit** Degree-Applicable Credit Course

**Status:**

**Foothill GE:** Non-GE

**Transferable:** CSU

**Grade Type:** Letter Grade (Request for Pass/No Pass)

**Repeatability:** Not Repeatable

Problems of and control solutions for diseases, insects, and weeds in landscapes and gardens. Ecologically based Integrated Pest Management (IPM) practices for handling plant pathogens, insect infestations, and unwanted vegetation. Emphasis on identification, life cycles, and symptoms of diseases, insects, and weeds.

## **HORT 54A • LANDSCAPE CONSTRUCTION: GENERAL PRACTICES**

**Units:** 5  
**Hours:** 4 lecture, 3 laboratory per week (84 total per quarter)

**Degree and Credit** Degree-Applicable Credit Course

**Status:**

**Foothill GE:** Non-GE

**Transferable:** CSU

**Grade Type:** Letter Grade (Request for Pass/No Pass)

**Repeatability:** Not Repeatable

General practices of construction as applied to landscape projects. Basic tools and equipment, building materials and hardware, and installation techniques utilized in landscape construction. Focus is on hardscape applications, including paving, walls, masonry, decks, and related wood structures. Basics of installation of water features, landscape lighting and plant material. Overview of cost estimating. Review of safety practices, careers in landscape construction, and contractor licensing.

## **HORT 54B • LANDSCAPE CONSTRUCTION: TECHNICAL PRACTICES**

**Units:** 3  
**Hours:** 2.5 lecture, 1.5 laboratory per week (48 total per quarter)

**Degree and Credit** Degree-Applicable Credit Course

**Status:**

**Foothill GE:** Non-GE

**Transferable:** CSU

**Grade Type:** Letter Grade (Request for Pass/No Pass)

**Repeatability:** Not Repeatable

Technical aspects of landscape construction projects. Landscape surveying and grading techniques, surface and subsurface hydraulics, landscape drainage systems, erosion control and soil conservation, fences and gates, and building codes. Estimating landscape materials, construction costs, and preparation of project bids and contracts.

## **HORT 54C • LANDSCAPE CONSTRUCTION: IRRIGATION PRACTICES**

**Units:** 3  
**Hours:** 2.5 lecture, 1.5 laboratory per week (48 total per quarter)

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU  
**Grade Type:** Letter Grade (Request for Pass/No Pass)  
**Repeatability:** Not Repeatable

Methods and materials used in the irrigation of ornamental landscapes. Selection of materials and operational theory of irrigation equipment. Installation techniques for sprinkler and drip irrigation systems. Water conservation features and maintenance of irrigation systems.

## **HORT 54J • HORTICULTURAL PRACTICES: INSECT IDENTIFICATION & DISORDERS**

**Units:** 3  
**Hours:** 3 lecture per week (36 total per quarter)

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU  
**Grade Type:** Letter Grade (Request for Pass/No Pass)  
**Repeatability:** Not Repeatable

Identification, morphology, physiology and management of common agricultural and horticultural insects. Review of the disorders caused by plant insects. Review of the impacts of common insects on the plant production and landscape industries and their identification throughout the life cycle of the insect.

## **HORT 54K • HORTICULTURAL PRACTICES: WEED IDENTIFICATION & ECOLOGY**

**Units:** 3  
**Hours:** 3 lecture per week (36 total per quarter)

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU  
**Grade Type:** Letter Grade (Request for Pass/No Pass)  
**Repeatability:** Not Repeatable

Identification, morphology, physiology and management of common agricultural and horticultural weedy plants. Review of the impacts of common weeds on the plant production and landscape industries and their identification throughout the life cycle of the plant. Review of the role of weeds in the landscape.

## **HORT 54L • HORTICULTURAL PRACTICES: DISEASE IDENTIFICATION & PATHOLOGY**

**Units:** 3  
**Hours:** 3 lecture per week (36 total per quarter)

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU  
**Grade Type:** Letter Grade (Request for Pass/No Pass)  
**Repeatability:** Not Repeatable

Identification, morphology, physiology and management of common agricultural and horticultural diseases. Study of the common diseases found in plants. Review of the impacts of common diseases on the plant production and landscape industries and their identification throughout the life cycle of the disease.

## **HORT 55A • GREEN INDUSTRY MANAGEMENT: BUSINESS PRACTICES**

**Units:** 3  
**Hours:** 3 lecture per week (36 total per quarter)

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU  
**Grade Type:** Letter Grade Only  
**Repeatability:** Not Repeatable

Introductory survey of green industry management and business practices. Geared to people in such fields as landscape construction, nursery management, and landscape design, this course focuses on helping individuals successfully organize, manage, and/or market their agency or small business. The course utilizes both a theoretical and hands-on approach to the application of common business principles.

## **HORT 60B • LANDSCAPE DESIGN: THEORY**

**Units:** 3  
**Hours:** 2 lecture, 3 laboratory per week (60 total per quarter)  
**Advisory:** HORT 40 and/or drafting skills strongly recommended.

**Degree and Credit Status:** Degree-Applicable Credit Course

**Foothill GE:** Non-GE  
**Transferable:** CSU  
**Grade Type:** Letter Grade (Request for Pass/No Pass)  
**Repeatability:** Not Repeatable

Principles of landscape design theory. Intermediate studies in and applications of graphic communication, creative problem solving, design theory, and presentation skills. Residential site analysis and landscape design case studies.

## **HORT 60C • LANDSCAPE DESIGN: IRRIGATION**

<b>Units:</b>	3
<b>Hours:</b>	2.5 lecture, 1.5 laboratory per week (48 total per quarter)
<b>Advisory:</b>	HORT 54C strongly recommended.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Principles of irrigation design for ornamental landscapes. Includes history of irrigation, advanced site analysis, irrigation design theory, equipment selection and layout, controller scheduling, long-term maintenance, and water conservation issues. Process of producing irrigation plans, details, and specifications.

## **HORT 60D • LANDSCAPE DESIGN: PLANTING**

<b>Units:</b>	3
<b>Hours:</b>	2 lecture, 3 laboratory per week (60 total per quarter)
<b>Advisory:</b>	HORT 21, 22, 26, 40 and 60B recommended.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

The use of ornamental and native plant materials to express basic design principles in the landscape. Planting design theory as it applies to the aesthetic, cultural, ecological, and functional use of plant materials in the landscape. Graphics used for presenting planting designs. Special focus on the use of plants in garden designs.

## **HORT 60F • LANDSCAPE DESIGN: PROCESS**

<b>Units:</b>	3
<b>Hours:</b>	2 lecture, 3 laboratory per week (60 total per quarter)
<b>Advisory:</b>	HORT 40 and 60B.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Principles of landscape design process. Application of residential site analysis, program development, and landscape design theory to one or more residential scale projects. Project planning and budgeting. Landscape designer, client, and green industry professional interactions.

## **HORT 60G • LANDSCAPE DESIGN: INTERMEDIATE COMPUTER APPLICATIONS**

<b>Units:</b>	3
<b>Hours:</b>	2 lecture, 3 laboratory per week (60 total per quarter)
<b>Advisory:</b>	HORT 21, 22, 26, 40 and 60B recommended.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Advanced use of Vectorworks as a landscape design and drafting tool. Topics covered include structuring of drawings using layers, improving drawing skills using tool commands and shortcuts, importing and rescaling PDFs for basemaps, importing images, creating viewports and sheet layers. Also covered will be customizing tool bars, expanding plant database, and importing/exporting/printing drawings. Introduction to three-dimensional drawing using Vectorworks and related programs.

## **HORT 60J • SKETCHUP FOR LANDSCAPE DESIGNERS**

<b>Units:</b>	3
<b>Hours:</b>	2.5 lecture, 1.5 laboratory per week (48 total per quarter)
<b>Advisory:</b>	HORT 40.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

An overview and application of Google Sketchup to three-dimensional rendering for the landscape designer. Emphasizing the basics of drawing setup, creation and editing, this course will show the designers how to turn their 2-D drawings into a presentation drawing that illustrates their ideas in photo-like rendering techniques. Importing and use of the three-dimensional tools available in Sketchup Make and Sketchup Pro will be included. Intended for students seeking a landscape design career or professionals upgrading their skills.

## **HORT 80A • ENVIRONMENTAL HORTICULTURE FALL SKILLS**

<b>Units:</b>	2
<b>Hours:</b>	1 lecture, 3 laboratory per week (48 total per quarter)
<b>Advisory:</b>	Not open to students with credit in HORT 80.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Course provides skills development opportunities in environmental horticulture for the Fall season. This is an extension of classroom instruction, covering topics such as mulching, irrigation winterization, late season landscape construction practices, and protection for frost sensitive plantings. This course offers students learning opportunities through a combination of on-site practical field experience, independent research, student internship, community service and industry related educational opportunities in the green industry.

## **HORT 80B • ENVIRONMENTAL HORTICULTURE WINTER SKILLS**

<b>Units:</b>	2
<b>Hours:</b>	1 lecture, 3 laboratory per week (48 total per quarter)
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Course provides skills development and internship opportunities in environmental horticulture for the Winter season. This is an extension of classroom instruction, covering topics such as woody tree and shrub pruning, drainage practices, winter plant protection, and rainwater harvesting. This course offers students learning opportunities through a combination of on-site practical field experience, independent research, student internship, community service and industry related educational opportunities in the green industry.

## **HORT 80C • ENVIRONMENTAL HORTICULTURE SPRING SKILLS**

<b>Units:</b>	2
<b>Hours:</b>	1 lecture, 3 laboratory per week (48 total per quarter)
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Course provides skills development opportunities in environmental horticulture for the Spring season. This is an extension of classroom instruction, covering topics such as the initiation of landscape construction projects, pests and diseases, vegetable crops, composting, and water management. This course offers students learning opportunities through a combination of on-site practical field experience, independent research, student internship, community service and industry related educational opportunities in the green industry.

## **HORT 80D • ENVIRONMENTAL HORTICULTURE SUMMER SKILLS**

<b>Units:</b>	2
<b>Hours:</b>	1 lecture, 3 laboratory per week (48 total per quarter)
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Course provides skills development opportunities in environmental horticulture for the Summer season. This is an extension of classroom instruction, covering topics such as irrigation system installation and maintenance, fruit tree pruning, Integrated Pest Management, landscape construction, summer landscape maintenance and water conservation practices. The course offers students learning opportunities through a combination of on-site practical field experience, independent research, student internship, community service and industry related educational opportunities in the green industry.

## **HORT 80I • LANDSCAPE CERTIFICATION: IRRIGATION INSTALLATION**

<b>Units:</b>	2
<b>Hours:</b>	2 lecture per week (24 total per quarter)
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

General subjects related to certification with the California Landscape Contractors Association. Topics include irrigation plan reading, advanced irrigation components, basic horticultural principles, lateral repair and head adjustment, advanced program controller, lateral installation, mainline installation, valve repair, valve wiring, and pipe installation equipment. This course is intended for students seeking Certified Landscape Technician certification.

## **HORT 80K • LANDSCAPE CERTIFICATION: ORNAMENTAL MAINTENANCE**

<b>Units:</b>	1
<b>Hours:</b>	1 lecture per week (12 total per quarter)
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

General subjects related to certification with the California Landscape Contractors Association. Topics include ornamental horticulture maintenance principles, irrigation principles, irrigation components, maintenance calculations, plant identification review, controller programming, lateral repair and head adjustment, tree planting and staking, pruning, safe operation of landscape maintenance equipment. This course is intended for students seeking Certified Landscape Technician certification.

## **HORT 90D • HERBS: IDENTIFICATION, USE & FOLKLORE**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

An introductory look at the use and folklore of herbs grown for specific cultural purposes. Herbs noted for their culinary, aromatic, or medicinal properties.

## **HORT 90E • HORTICULTURAL & LANDSCAPE PHOTOGRAPHY**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Advisory:</b>	HORT 21, 22, 26, 40 and 60B recommended.
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Introduction to basic photographic equipment and techniques utilized in photographing landscapes and horticulturally related elements. Emphasis on assisting green industry professionals in photographing ornamental plants, landscape construction or business-related projects, and landscape designs.

## **HORT 90F • LANDSCAPE DESIGN: BASIC PRINCIPLES**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

An overview of the basic principles of landscape design. Presents basic graphic communication concepts. Also explores the concept of master planning residential landscapes, and designing with plant material and related landscape elements.

## **HORT 90G • LANDSCAPE DESIGN FORUM**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Design topics for residential landscapes. Covers current concepts and trends in the landscape design industry through topical presentations, guest speakers, and discussion groups. Explores methods for evaluating successful landscape designs and their implementation.

**HORT 90H • LANDSCAPE LIGHTING**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Basic theory, design, and installation techniques for lighting residential landscapes. The effective use of conventional and low-voltage lighting for improving landscape aesthetics and the functional use of outdoor spaces.

**HORT 90I • LANDSCAPE SUSTAINABILITY PRACTICES**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Principles and practices utilized in the design, implementation, and maintenance of sustainable landscapes and gardens. Reviews ecological principles of sustainability for efficient energy use in the environment.

**HORT 90K • LANDSCAPING WITH EDIBLES**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

The use of edible plants in residential landscapes. Practice and feasibility of integrating edible plants into landscape designs. Identification of ornamental plant materials which produce edible fruit, foliage, flowers or other edible parts.

**HORT 90L • PLANT PROPAGATION: BASIC SKILLS**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Introduction to propagation of plants by sexual and asexual methods. Seeding, cutting, grafting, division of specialized structures, and micro-propagation discussed and demonstrated. Discussions include growing media, fertilizers, hormones, and other plant supplements.

**HORT 90P • PRUNING: BASIC SKILLS**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Methods of pruning deciduous and evergreen plant materials. Emphasis on pruning common landscape plants, fruit trees, and roses. Selection of suitable pruning tools, techniques for pruning safely, and use and maintenance of tools and equipment.

**HORT 90Q • RESIDENTIAL IRRIGATION SYSTEMS**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Basic design and installation techniques for residential landscapes. Course takes a hands-on approach to understanding the materials and techniques used in installing both drip and spray irrigation systems. Examines methods for evaluating performance of existing irrigation systems.

## **HORT 90U • LANDSCAPE DESIGN: PERSPECTIVE SKETCHING**

<b>Units:</b>	2
<b>Hours:</b>	24 lecture per quarter (24 total per quarter)
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Basic perspective sketching for landscape design presentations. Setup and rendering of one-point and two-point perspectives, including location of horizon lines and vanishing points, height determination, positioning of objects, and rendering techniques for plants, people, structures, and hardscape. Emphasis is on creating one-point, quick sketch perspectives for presentation to clients.

## **HORT 90V • SUSTAINABLE ORGANIC GARDENING**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Principles and practices utilized in the design, implementation, and maintenance of sustainable and organic gardens. Sustainable gardening practices that produce successful, environmentally responsible produce and crops.

## **HORT 90X • WATER CONSERVATION IN LANDSCAPE DESIGN**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade (Request for Pass/No Pass)
<b>Repeatability:</b>	Not Repeatable

Applies principles of water conservation to landscape design and construction projects. Landscape designs which incorporate water-conserving principles strive to limit the need for water and strike a balance between softscape and hardscape elements.

## **HORT 90Y • CACTI & SUCCULENTS**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Identification, taxonomy, habits of growth, cultural and environmental requirements of plants grown in California. Emphasis on the use and maintenance of cacti and succulents with significant design features and landscape uses. Plants are observed via media and physical observation.

## **HORT 90Z • ORNAMENTAL GRASSES**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Advisory:</b>	HORT 15 strongly recommended.
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Identification, taxonomy, habits of growth, cultural and environmental requirements of ornamental grasses grown in California. Emphasis on the use and maintenance of these monocots. Plants are observed via media and physical observation.

## **HORT 91A • COMPOSTING THEORY & TECHNIQUES**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit Status:</b>	Degree-Applicable Credit Course
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Comprehensive introduction to the theory and practices utilized in composting of organic materials. Course provides a combination of classroom lectures, demonstrations, and activities geared to providing a clear understanding of various composting techniques, including sustainable waste management practices, recycling of organics, backyard composting, and vermicomposting.

## **HORT 91C • CONSTRUCTION COST ESTIMATING**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

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.

## **HORT 91E • COMMUNITY GARDENING**

<b>Units:</b>	1
<b>Hours:</b>	12 lecture per quarter (12 total per quarter)
<b>Degree and Credit</b>	Degree-Applicable Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	CSU
<b>Grade Type:</b>	Letter Grade Only
<b>Repeatability:</b>	Not Repeatable

Standards and techniques for developing community-based gardens, including community plots, maintenance of contracted plots, and management of garden-oriented non-profit gardens. Topics include site selection, development of planting beds, selection of plant species, cultural management of crops, harvesting and marketing of crops.

## **HORT 400A • PEST MANAGEMENT: CULTURAL REQUIREMENTS**

<b>Units:</b>	0
<b>Hours:</b>	6 lecture per quarter (6 total per quarter) This course meets 1 time per quarter.
<b>Degree and Credit</b>	Non-Degree-Applicable Non-Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	None
<b>Grade Type:</b>	Non-Credit Course (Receives no Grade)
<b>Repeatability:</b>	Unlimited Repeatability

This course will focus on the cultural requirements to reduce pesticide use. The first portion will concentrate on building soil and will discuss the chemicals that are deleterious to building soil. The next portion will discuss the methods used to diagnose problems with plants by determining whether it is caused by an organism (living or biotic) or not (non-living or abiotic). Integrated pest management uses the IPM pyramid or a hierarchical scale to select the right pesticide. New products in the marketplace will show the products that are relatively new in the pesticide realm. Weeds are a plant seemingly without virtue. This course will discuss methods of pesticide use to reduce the incidence of pesticide resistance, review the cultural controls for controlling weeds, and indicate which of these plants have benefits in a cropping system. This course may satisfy requirements for those students seeking continuing education for pesticide applicator licensure.

## **HORT 400B • PEST MANAGEMENT: PEST CONTROL**

<b>Units:</b>	0
<b>Hours:</b>	6 lecture per quarter (6 total per quarter) This course meets 1 time per quarter.
<b>Degree and Credit</b>	Non-Degree-Applicable Non-Credit Course
<b>Status:</b>	
<b>Foothill GE:</b>	Non-GE
<b>Transferable:</b>	None
<b>Grade Type:</b>	Non-Credit Course (Receives no Grade)
<b>Repeatability:</b>	Unlimited Repeatability

This course will introduce students to the polyphagous shot hole borer as a means to biological control through predators. Additional topics include differentiating insects and exploring alternatives to pesticide use in lawn. This course may satisfy requirements for those students seeking continuing education for pesticide applicator licensure.

## **HORT 400C • PEST MANAGEMENT: WORKING WITH PESTICIDES**

**Units:** 0

**Hours:** 6 lecture per quarter (6 total per quarter)  
This course meets 1 time per quarter.

**Degree and Credit Status:** Non-Degree-Applicable Non-Credit Course

**Foothill GE:** Non-GE

**Transferable:** None

**Grade Type:** Non-Credit Course (Receives no Grade)

**Repeatability:** Unlimited Repeatability

This course will address current topics in proper pesticide selection and handling. Topics will include reading and understanding a pesticide label, pesticide formulations and pesticide worker safety and use of personal protective equipment. This course may satisfy requirements for those students seeking continuing education for pesticide applicator licensure.