

# ORNAMENTAL HORTICULTURE



The Ornamental Horticulture Department offers multiple programs that prepare students for entry-level employment and/or potential further study in the fields of **Ornamental Horticulture, Floral Technology, Landscape Design, Landscape Management, and Retail Nursery**. Students completing these degrees/certificates will have a basic foundation in Ornamental Horticulture and skills that include: plant propagation, pest management, plant identification and basic ornamental horticulture skills and practices.

Career opportunities include preparation for employment in the following areas: nursery sales associate or production, garden center, landscape maintenance, or parks and recreation.

## Videos

- Landscape Design (<https://vimeo.com/513073231/>)
- Landscape Management (<https://vimeo.com/513058325/>)

## Contact Information

### Ornamental Horticulture Faculty Contact

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### Agriculture Division Chair

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## Associate Degree

- Associate of Science in Landscape Management (AS) (<https://catalog.cos.edu/areas-study/ornamental-horticulture/associate-science-landscape-management-not-for-transfer-as/>)
- Associate of Science in Ornamental Horticulture (AS) (<https://catalog.cos.edu/areas-study/ornamental-horticulture/associate-science-ornamental-horticulture-not-for-transfer-as/>)

## Certificates

- Certificate of Achievement in Landscape Design (<https://catalog.cos.edu/areas-study/ornamental-horticulture/certificate-achievement-landscape-design/>)
- Certificate of Achievement in Landscape Management (<https://catalog.cos.edu/areas-study/ornamental-horticulture/certificate-achievement-landscape-management/>)
- Certificate of Achievement in Ornamental Horticulture (<https://catalog.cos.edu/areas-study/ornamental-horticulture/certificate-achievement-ornamental-horticulture/>)
- Skill Certificate in Ornamental Horticulture: Retail Nursery Skills Option (<https://catalog.cos.edu/areas-study/ornamental-horticulture/skill-certificate-ornamental-horticulture-retail-nursery-skills-option/>)

For a complete list of courses and descriptions visit: COURSES (<https://catalog.cos.edu/course-descriptions/>)

### OH 001 Introduction to Horticultural Science

3unit(s)

Hours: 3 Lecture/Discussion Hours:

1 Lab

This is an introductory course in ornamental horticulture. The main topics covered in class include: introduction to the ornamental horticulture field and related employment opportunities, introduction to plant taxonomy, plant anatomy and physiology, environmental requirements for plant growth and development, basic plant propagation techniques, integrated pest management, and the fundamentals of soil, water and fertilizers. Students learn how the ornamental horticulture industry applies and utilizes this knowledge at a practical level, and how new knowledge is acquired through experimental research employing the scientific method.

### OH 002 Plant Identification 1

3unit(s)

Hours: 3 Lecture/Discussion Hours:

1 Lab

This course presents botanical nomenclature, scientific and common plant names, how plants are used in the landscape, forms of plants, and soil and nutritional requirements. Plants emphasized will come from the current plant list for the California Association of Nurseries and Garden Centers (CANGC) Certification Test. Plant material grown in the local regions will also be included.

**Advisory on Recommended Preparation:** OH 001 or equivalent college course with a minimum grade of C. (C-ID AG-EH108L)

### OH 003 Plant Identification 2

3unit(s)

Hours: 3 Lecture/Discussion Hours:

1 Lab

This course presents botanical nomenclature, scientific and common plant names, uses of ornamental plants in the landscape, general forms and growth habits of plants, and plant environmental requirements. Plants emphasized will come from the current plant list for the California Association of Nurseries and Garden Centers (CANGC) Certification Test. Plant material grown in the local regions will also be included.

**Advisory on Recommended Preparation:** OH 001 or equivalent college course with a minimum grade of C. (C-ID AG-EH112L)

**OH 007 Principles of Landscape Design****3unit(s)**Hours: 3 Lecture/Discussion Hours:  
1 Lab

This course covers the fundamental principles of residential landscape design. Design theory, client needs, location design solutions, plant combination theory and an appreciation for quality designs are emphasized. Computer landscape drafting software is utilized to produce designs.

**Advisory on Recommended Preparation:** OH 206 or an equivalent college course with a minimum grade of C.

**OH 105 Plant Propagation****3unit(s)**Hours: 3 Lecture/Discussion Hours:  
1 Lab

Plant propagation and production practices with emphasis on nursery operations including sexual and asexual reproduction, planting, transplanting, fertilizing, plant pest and disease control; structures and site layout; preparation and use of propagating and planting mediums; use and maintenance of common tools and equipment; regulations pertaining to plant production. Laboratory required.

**Advisory on Recommended Preparation:** OH 001 or equivalent college course with a minimum grade of C. (C-ID AG-EH116L)

**OH 109 Landscape Maintenance****3unit(s)**Hours: 3 Lecture/Discussion Hours:  
1 Lab

This course is a lecture lab combination and covers skills and activities related to landscape maintenance and management such as pruning, planting, fertilizing, irrigation system maintenance and repair, lawn mowing, pest and disease control, safety on the worksite, and landscape management equipment operation and safety.

**Advisory on Recommended Preparation:** OH 001 or equivalent college course with a minimum grade of C.

**OH 111 Floral Design****3unit(s)**Hours: 3 Lecture/Discussion Hours:  
1 Lab

This introductory course in floral design covers the various phases of floral design. This course includes fundamentals of theory, skills and techniques practiced in the floral industry. Through floral design, students will develop an awareness of art principles and the ways in which people throughout the ages and in different cultures have used floral arrangements to enhance their lives through artistic expression. This course also considers care and handling of plant materials and proper use of tools when designing floral arrangements.

**OH 204 Nursery and Greenhouse Production****3unit(s)**Hours: 3 Lecture/Discussion Hours:  
1 Lab

This course provides a historical overview of the nursery industry. It covers the basic operation activities and practices of commercial nurseries. Students receive practical experience in various aspects of the nursery industry including: propagating, fertilizing, training, pruning, transplanting, potting, irrigating, marketing, selling, and controlling pests and diseases. Emphasis is on ornamental trees, shrubs, and flowering annuals and perennials. This course is a lecture/lab combination.

**Advisory on Recommended Preparation:** OH 001 or equivalent college course with a minimum grade of C.

**OH 206 Landscape Drafting****3unit(s)**Hours: 3 Lecture/Discussion Hours:  
1 Lab

This course is designed to teach students the basic drafting techniques and standards for creating residential landscape plans using computer drafting software. Students learn landscape symbols, lettering styles and methods of drafting landscape plans using section and detail drawings.

**OH 208 Landscape Construction****3unit(s)**Hours: 3 Lecture/Discussion Hours:  
1 Lab

This course covers the fundamentals of residential landscape construction including: soil preparation, hardscape installation and maintenance, construction materials, hand and power tools, construction equipment, turf and plant installation, plan reading, bidding and estimating, and basic irrigation system construction.

**Advisory on Recommended Preparation:** OH 109 and OH 217 or equivalent college courses with a minimum grade of C.

**OH 210 Turfgrass Management****3unit(s)**Hours: 3 Lecture/Discussion Hours:  
1 Lab

This course in turfgrass management emphasizes the management practices used to grow turf in the San Joaquin Valley. Content includes identification of common turfgrass varieties, an overview of common techniques and equipment utilized to propagate, mow, fertilize, aerate, and irrigate turfgrass, the management of common pests and diseases, and the maintenance and operation of turf equipment.

**Advisory on Recommended Preparation:** OH 001 or equivalent college course with a minimum grade of C.

**OH 213 Wedding Flowers****3unit(s)**Hours: 2.5 Lecture/Discussion Hours:  
1.5 Lab

This course focuses on advanced styling of floral designs to wear and carry, as practiced specifically in wedding work, including complete coverage of wedding bouquets, corsages, church decorations, balloons and bouquet decor and the basic principles of theory and design relevant to wedding styles.

**Advisory on Recommended Preparation:** OH 111 or equivalent college course with a minimum grade of C.

**OH 217 Landscape Irrigation****3unit(s)**Hours: 3 Lecture/Discussion Hours:  
1 Lab

This course covers the identification of system components, design concepts, installation and assembly of various landscape irrigation systems. It is a requirement for the Landscape Management Certification Program.

**OH 218 Xeriscape: Water Conservation****3unit(s)**Hours: 3 Lecture/Discussion Hours:  
1 Lab

This course will prepare students to utilize the principles of xeriscaping when evaluating, planning, designing, installing and maintaining landscapes. The primary focus of the course is to prepare students to utilize horticultural theory and practices to conserve water in the management of landscapes.

**OH 220 Diseases of Ornamentals****3unit(s)**

Hours: 3 Lecture/Discussion Hours:  
1 Lab

This course covers the diagnosis, analysis and management of plant diseases. The focus is on the principles and methods of controlling plant diseases including biological, cultural, physical, mechanical and chemical. Pesticide safety, formulations, and methods of application are presented. It helps students prepare for the pest control adviser's examination.

**Advisory on Recommended Preparation:** OH 001 and PLSI 001 or equivalent college course with a minimum grade of C.

**OH 222 Pests of Ornamentals****3unit(s)**

Hours: 3 Lecture/Discussion Hours:  
1 Lab

This course covers the elements of identification and management of pest and beneficial organisms of economic importance to the landscape and nursery management industries. Principles of controlling pests including biological, cultural, physical, mechanical, and chemical are discussed. Pesticide safety, formulations, methods of application, and laws and regulations are presented. This class helps students prepare for the Pest Control Adviser's examination, and the Qualified Applicator License exam.

**Advisory on Recommended Preparation:** OH 001 or PLSI 001 or equivalent college course with a minimum grade of C.

## Ornamental Horticulture

Fernandez, Fernando

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