

# HORTICULTURE

- Ecological Horticulture, Certificate of Achievement
- Horticulture, Associate in Science
- Horticulture, Certificate of Achievement
- Landscape Irrigation, Certificate of Achievement
- Landscape Pest Management, Certificate of Achievement
- Tree Care Specialist, Certificate of Achievement

## Horticulture (HORT)

### HORT 51 - Introduction to Horticulture I (3 units)

*Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 42.5 hours lecture; 25.5 hours lab*

This course introduces students to career opportunities and skills needed to be successful in the horticulture industry. It explores plant science, including plant structure, growth processes, planting techniques, fertilizers, garden color, pruning options, lawn care strategies, and the basics of plant propagation and pest control. Field trips may be included. Portions of instruction may be offered online; may also be offered fully online.

*Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE  
Credit transferable: Transfers to CSU  
GE Credit: MPC E2 Career Exploration*

### HORT 52 - Introduction to Horticulture II (3 units)

*Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 42.5 hours lecture; 25.5 hours lab*

Surveys plant types and discusses proper plant use in the developed landscape. Includes an introduction to basic pruning, plant propagation, lawn care, landscape design, indoor plant care, container gardening, growing vegetables, herbs, fruit trees and native plants. May include field trips. Portions of instruction may be offered online; may also be offered fully online.

*Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE  
Credit transferable: Transfers to CSU*

### HORT 53 - Soil Science and Management (4 units)

*Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 51 hours lecture; 51 hours lab*

This course offers an examination of the biological, chemical, physical, and genetic composition of soils. It includes soil sampling, testing, and analysis of soil quality. It also covers exploration of strategies to improve soil quality and soil conservation for environmental and agricultural purposes. The course also offers an introductory overview of soils and human civilizations, including water management, agricultural production, and septic and gray water systems. Portions of instruction may be offered online; may also be offered fully online.

*Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE  
Credit transferable: Transfers to CSU & UC  
GE Credit: MPC B Natural Sciences (must include lab)*

### HORT 55 - Tree Care (3 units)

*Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 42.5 hours lecture; 25.5 hours lab*

This course offers an introduction to the selection, care and management of trees in the Monterey Peninsula landscape and beyond. This course helps students prepare for the International Society of Arboriculture (ISA) certification exam and covers planting, training, protecting, and fertilizing trees. Basic pruning, plant biology, and soil/water/nutrient management are also discussed, along with pest and disease diagnosis and control, fruit tree care, tree identification, and unique aspects of operating a tree maintenance business, including safe work practices in arboriculture. Portions of instruction may be offered online; may also be offered fully online.

*Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE  
Credit transferable: Transfers to CSU*

### HORT 61 - Plant Identification: Shrubs, Vines, and Ground Covers (3 units)

*Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 42.5 hours lecture; 25.5 hours lab*

This course covers identification, habits of growth, cultural requirements, and use of ornamental plants in the landscape. It focuses on the selection, planting, care and maintenance of ornamental and native shrubs, vines and groundcovers. Field trips are included. Portions of instruction may be offered online; may also be offered fully online.

*Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE  
Credit transferable: Transfers to CSU*

### HORT 62 - Plant Identification: Trees, Annuals, and Perennials (3 units)

*Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 42.5 hours lecture; 25.5 hours lab*

This course covers the identification, habits of growth, cultural requirements, and use of ornamental plants in the landscape. It focuses on the selection and care of trees, shrubs, hedges, ornamental grasses, annuals, and perennials for use in California landscapes. Students are also introduced to the fundamentals of landscape planning, design, and maintenance. Field trips may be included. Portions of instruction may be offered online; may also be offered fully online.

*Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE  
Credit transferable: Transfers to CSU*

### HORT 63 - Plant Propagation (3 units)

*Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 42.5 hours lecture; 25.5 hours lab*

This course covers plant propagation principles and techniques, including seed collection, cuttings, budding, grafting, layering, division, leaf pieces, and tissue culture. Students discuss the facilities, equipment, and tools required for nursery and greenhouse production, growing media and fertilizers, and the appropriate hormones and chemicals used in basic propagation procedures. It also covers sanitation, propagation scheduling, lining out, and potting up. Field trips may be included. Portions of instruction may be offered online; may also be offered fully online.

*Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE  
Credit transferable: Transfers to CSU*

**HORT 64 - Growing and Using California Native Plants (3 units)**

Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 42.5 hours lecture; 25.5 hours lab

Students learn how to select, grow and use California native plants for commercial or private use and/or for habitat restoration. Propagation methods, growth requirements, specific landscape uses, and species identification are covered. This course also includes hands-on work, guest speakers, and field trips. Portions of instruction may be offered online; may also be offered fully online.

*Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE*  
*Credit transferable: Transfers to CSU*

**HORT 65 - Basic Landscape Design (3 units)**

Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 42.5 hours lecture; 25.5 hours lab

This course is an introduction to the principles of landscape design: drafting techniques, landscape drawing, site analysis, selection of plant materials, maintenance specifications, and cost considerations are covered. Students are also given the opportunity to solve real-world problems and practice working with clients. Drafting equipment is required. Field trips may be included. Portions of instruction may be offered online; may also be offered fully online.

*Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE*  
*Credit transferable: Transfers to CSU*

**HORT 66 - Intermediate Landscape Design (3 units)**

Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 42.5 hours lecture; 25.5 hours lab

This course involves further study in landscape design with emphasis on site analysis and details, cost considerations, maintenance specifications, larger scale design, and improved drawing methods. Drafting equipment is required. Field trips are included. Portions of instruction may be offered online; may also be offered fully online.

*Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE*  
*Credit transferable: Transfers to CSU*

**HORT 70 - Irrigation Design and Water Economy (3 units)**

Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 51 hours lecture

This is a course in the theory and practice of designing water efficient irrigation systems for sustainable garden and landscape projects including drip and sprinkler devices, water supply assessment, soil testing, smart controllers, hydraulics, pipe sizing, backflow prevention and current topics in landscape irrigation, all with a focus on water conservation. The course content prepares students for the Qualified Water Efficient Landscaper (QWEL) certification exam. Field trips may be included. Portions of instruction may be offered online; may also be offered fully online.

*Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE*  
*Credit transferable: Transfers to CSU*

**HORT 72 - Landscape Construction (3 units)**

Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 42.5 hours lecture; 25.5 hours lab

This lecture and lab class offers instruction and practice in reading landscape plans and the processes of making landscape installations. Skill development through hands-on activities or simulations involving some of these: grading, planting, paving, walks, decking, irrigation, lighting, retaining walls, or fencing. Safe and efficient use of tools and power equipment included. Plan reading, job planning, and cost estimating skills also covered. Safe work practices required. Portions of instruction may be offered online; may also be offered fully online.

*Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE*  
*Credit transferable: Transfers to CSU*

**HORT 78 - Integrated Pest Management (3 units)**

Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 42.5 hours lecture; 25.5 hours lab

This course covers the theory and practice of integrated pest management (IPM) in managed landscapes or nursery operations. IPM stresses identification and monitoring of plant pests and determining whether control measures are justified and selecting the least harmful tactic if control measures are deemed necessary. Identifying common plant diseases, weeds, invertebrate and vertebrate pests is stressed. The safe and effective use of pesticides is also covered. This course helps prepare students for the Qualified Applicator Certificate (QAC) exam administered by the Calif. Dept. of Pesticide Regulation. Field trips may be included. Portions of instruction may be offered online; may also be offered fully online.

*Advisory: Completion of or concurrent enrollment in ENGL 1A or ENGL 1AE*  
*Credit transferable: Transfers to CSU*

**HORT 202 - Landscape Pruning (0.5 units)**

Pass/No Pass (P/NP) Only • Total hours: 8.5 hours lecture; 3 hours lab

This course offers hands-on experience pruning common ornamental plants, including flowering trees, shrubs, vines, roses and/or fruit trees. Winter versus summer pruning is discussed, along with the appropriate selection of plants for special pruning techniques, such as bonsai, topiaries, and hedging. Portions of instruction may be offered online; may also be offered fully online.

*Credit transferable: Non-transferable*

**HORT 210 - Current Topics in Horticulture (0.5 units)**

Letter Grade (LG) or Pass/No Pass (P/NP) • Total hours: 8.5 hours lecture

This course covers topics of current interest and importance presented by specialists in the field of Horticulture. Portions of instruction may be offered online; may also be offered fully online.

*Credit transferable: Non-transferable*

**HORT 425 - Successful Gardening Techniques (0 units)**

Non Credit • Total hours: 34 hours lab

This course covers fundamental horticultural techniques for home gardeners including tool selection and maintenance, pruning, soil management, planting, fertilizing, irrigation, and pest and disease control. Portions of instruction may be offered online; may also be offered fully online.

*Repeatable: Noncredit*