

# ENVIRONMENTAL HORTICULTURE

Environmental Horticulture (EH) teaches students the skills and knowledge required for success in the professions of landscape maintenance, landscape design, permaculture, nursery and greenhouse work, and ecological restoration. The program encourages professional standards, a strong work ethic and environmentally sound practices.

Horticulture industry professionals from the local community serve as members of the EH Department's Advisory Committee, providing guidance and expertise in enhancing the EH program's curriculum to ensure students are receiving up-to-date knowledge and skills needed to garner positions in the industry.

Through field trips and professional guest speakers, students have a chance to meet actual horticulture businesses and meet industry professionals. This helps prepare the student for future work and lays the groundwork for student's professional horticulture contacts—many landscape industry employers, in search of energetic and skilled apprentices, contact the department when looking for new apprentices, interns and employees.

Class lectures are held inside, while the lab portion of classes utilize two outdoor, instructional gardens: the SBCC Lifescape Garden and the Chumash Point Ethnobotanical Preserve. The gardens are also the site of the department's nursery/greenhouse unit.

There are no prerequisites for EH courses: Each can be taken as a stand alone course for personal enrichment, or as a series working towards a college Certificate or A.S. degree in EH.

## Planning a Program of Study

Many students of this program enter with some horticulture experience, working in the department's horticulture garden on campus, in the landscape contracting industry, the nursery/greenhouse industry, in landscape maintenance, design or ecological restoration. However, some students enter the program with no background in horticulture and enroll to gain such experience. The classes are open to anyone, home gardener, professional landscaper, designer, or farmer. There are no pre-requisites for any courses and students can start the program with any class.

Typically, more advanced students in the program enroll in EH 290 Work Experience In Environmental Horticulture. This course is considered a vital aspect of the program—generating two to four units of credit each semester for enrollees and giving the student real-world experience in the horticulture field, before they graduate. The college, the student and job supervisor work together to develop meaningful work experience situations and projects. Often, the professional relationships forged during this course lead to longer-term employment for the student or at least exposure to successful professionals in the horticultural field.

Units earned under the one-year Certificate of Achievement program can be applied toward the Associate Degree; many articulate toward the Horticulture degree program offered by California Polytechnic State University and other California State Universities.

## Programs of Study

### Associate Degrees

- Environmental Horticulture, Associate of Science (AS), Ecological Restoration and Management Emphasis (<https://catalog.sbccc.edu/academic-departments/environmental-horticulture/environmental-horticulture-as-ecological-restoration-management-emphasis/>)
- Environmental Horticulture, Associate of Science (AS), Landscape Contracting C-27 License Emphasis (<https://catalog.sbccc.edu/academic-departments/environmental-horticulture/environmental-horticulture-as-landscape-contracting-emphasis/>)
- Environmental Horticulture, Associate of Science (AS), Landscape Design Emphasis (<https://catalog.sbccc.edu/academic-departments/environmental-horticulture/environmental-horticulture-as-landscape-design-emphasis/>)
- Environmental Horticulture, Associate of Science (AS), Nursery and Greenhouse Technology Emphasis (<https://catalog.sbccc.edu/academic-departments/environmental-horticulture/environmental-horticulture-as-nursery-greenhouse-technology-emphasis/>)

### Certificate of Achievement

- Environmental Horticulture, Certificate of Achievement (C) (<https://catalog.sbccc.edu/academic-departments/environmental-horticulture/environmental-horticulture-certificate-achievement/>)

### Skills Competency Awards

- Landscape Operations, Skills Competency Award (SCA) (<https://catalog.sbccc.edu/academic-departments/environmental-horticulture/landscape-operations-skills-competency-award/>)
- Sustainable Horticulture, Skills Competency Award (SCA) (<https://catalog.sbccc.edu/academic-departments/environmental-horticulture/sustainable-horticulture-skills-competency-award/>)

## Credit Courses Environmental Horticulture (EH)

### EH 101 Plant Identification And Culture (3 Units)

Hours: 90 (36 lecture, 54 lab)

Examines over 200 landscape plants commonly used in southern California, including trees, shrubs, vines and herbaceous plants. Each plant is studied for distinguishing characteristics and care requirements. Transfer Information: CSU Transferable, UC Transferable  
C-ID: AG - EH 108L

### EH 102 Soils And Plant Nutrients (3 Units)

Hours: 90 (36 lecture, 54 lab)

Covers soils as related to sustainable plant care. Emphasis on soil analysis, problem identification, soil remediation, soil enhancement and the soil food web.

Transfer Information: CSUGE Area B2, IGETC Area 5B, CSU Transferable, UC Transferable  
C-ID: AG - PS 128L

### EH 103 Irrigation And Garden Waterworks (3 Units)

Hours: 90 (36 lecture, 54 lab)

Introduces the materials and methods used in landscape irrigation system design, maintenance and repair. Simple plan reading, system scheduling, controller use and water conservation practices are emphasized.

Transfer Information: CSU Transferable

**EH 104 Landscape Maintenance (3 Units)**

Hours: 90 (36 lecture, 54 lab)

Covers basic sustainable methods of soil care, water efficient irrigation systems, pruning, fertilization, turf management, insect control, and weed control. Personal health and safety emphasized.

Transfer Information: CSU Transferable

**EH 105 Landscape Construction (3 Units)**

Hours: 90 (36 lecture, 54 lab)

Introduce basic landscape construction equipment, materials and methods, including plan reading, grading, drainage, concrete, masonry, carpentry, electrical and plumbing, C-27 license requirements, business practices and regulations.

Transfer Information: CSU Transferable

**EH 106 Greenhouse/Nursery Operations And Practices, Plant Propagation And Plant Recognition (3 Units)**

Hours: 90 (36 lecture, 54 lab)

Introduces greenhouse/nursery industry practices, including plant propagation methods, greenhouse design and maintenance, and the nursery market.

Transfer Information: CSU Transferable

C-ID: AG-EH 116.

**EH 109 Permaculture Design (5 Units)**

Hours: 90 (90 lecture)

Application of ecological and environmental principles to designing human systems that are locally sustainable and require reduced inputs. Upon successful completion of course, students will receive worldwide recognized Permaculture Design certification.

Transfer Information: CSU Transferable

**EH 109B Advanced Permaculture Design (3 Units)**

Hours: 90 (36 lecture, 54 lab)

Provides hands-on opportunities to gain skills in permaculture design, while reviewing and adding depth of knowledge to basic permaculture design concepts.

Transfer Information: CSU Transferable

**EH 110 Introduction to Horticulture (3 Units)**

Hours: 54 (54 lecture)

Introduction to central concepts of environmental horticulture.

Covers horticultural practices and methods, with focus on long-term sustainability and local ecological issues.

Transfer Information: CSUGE Area B2, IGETC Area 5B, CSU Transferable, UC Transferable

C-ID: AG - PS104

**EH 112 Ecological Restoration I (3 Units)**

Hours: 90 (36 lecture, 54 lab)

Principles and techniques of regional habitat restoration, with an emphasis on the identification, collection, propagation and care of native plants.

Transfer Information: CSUGE Area B2, IGETC Area 5B, CSU Transferable, UC Transferable

**EH 113 Ecological Restoration II (3 Units)**

Hours: 90 (36 lecture, 54 lab)

Review of the concepts, processes, techniques and politics involved in habitat restoration, with a focus on regional habitats, issues and long-term monitoring.

Transfer Information: CSU Transferable, UC Transferable

**EH 126 Landscape Drafting I (3 Units)**

Same as: DRFT 126

Hours: 72 (45 lecture, 27 lab)

Principles of drafting and plan reading for landscape architecture and ornamental horticulture. Style research, drafting of plans, elevations and details.

Transfer Information: CSU Transferable, UC Transferable

**EH 127 Landscape Drafting II (3 Units)**

Same as: DRFT 127

Prerequisites: DRFT 126 or EH 126.

Hours: 72 (45 lecture, 27 lab)

Advanced Drafting and plan reading course using manual and computer drafting tools. For landscape architecture and ornamental horticulture fields. Includes site plans, elevations and details.

Transfer Information: CSU Transferable, UC Transferable

**EH 201 Arboriculture (3 Units)**

Hours: 54 (54 lecture)

Introduction to the care of woody plants, including trees, shrubs, vines and palms. Covers function, structure, taxonomy, anatomy and physiology of woody plants; the effects of soil, water and fertilizer, pruning, safety, planting, early care, and diagnostics of pests and disease.

Transfer Information: CSU Transferable, UC Transferable

**EH 202 Residential Landscape Design (3 Units)**

Hours: 54 (54 lecture)

Foundational course for basic skills in design and implementation of residential landscaping. Theory and practical development of skills and artforms associated with hardscape and softscape elements and plans examined.

Transfer Information: CSU Transferable

**EH 207 Small Scale Food Production (3 Units)**

Hours: 90 (36 lecture, 54 lab)

Explores the natural and sustainable techniques and skills used to produce healthy organic produce. Soil development, composting, mulching, suitable vegetables, fruit trees and herb cultivation covered.

Transfer Information: CSU Transferable

**EH 290 Work Experience In Environmental Horticulture (2-4 Units)**

Prerequisites: Any 100 level EH class.

Hours: 216 (216 lab)

Exploration of elements essential to success in the fields of horticulture, including proper work ethic, job searching and job preparation. Outside of class, students work to earn credit. Time sheets are done monthly, supervisor evaluation is required, and a three-way semester contract is developed between the student, the student's supervisor and the instructor. Course restricted to 3 repetitions

Transfer Information: CSU Transferable

**EH 299 Independent Study In Environmental Horticulture (1-4 Units)**

Limitations on Enrollment: Completion of a minimum of 12 units at SBCC, with a 2.5 G.P.A., and a minimum of 6 units, with a 3.0 G.P.A. within the department.

Hours: 192 (192 lab)

For complete information, see "Independent Study" in the Catalog Index.

Transfer Information: CSU Transferable