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 in Science (AS), Landscape Contracting C-27 License Emphasis (https://catalog.sbcc.edu/academic-departments/environmental-horticulture/environmental-horticulture-as-landscape-contracting-emphasis/)
- Environmental Horticulture, Associate in Science (AS), Landscape Design Emphasis (https://catalog.sbcc.edu/academic-departments/environmental-horticulture/environmental-horticulture-as-landscape-design-emphasis/)

Certificate of Achievement

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

Skills Competency Awards

- Landscape Operations, Skills Competency Award (SCA) (https://catalog.sbcc.edu/academic-departments/environmental-horticulture/landscape-operations-skills-competency-award/)
- Sustainable Horticulture, Skills Competency Award (SCA) (https://catalog.sbcc.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)
Designed to acquaint the student with woody ornamental plants and selected accent plants used in the Santa Barbara region. Approximately 150 trees, shrubs, vines and herbaceous ornamentals are presented for identification and close scrutiny.
Transfer Information: CSU Transferable, UC Transferable
C-ID: AG - EH 108L

EH 102 Soils And Plant Nutrients (3 Units)
Skills Advisories: Eligibility for ENG 98 and proficiency in MATH 001 or MATH 041.
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)
Introduction to the materials and methods used in landscape irrigation system design, maintenance and repair. Trouble-shooting and retrofitting systems for water conservation are also highlighted including drip and underground systems. Simple plan reading, system scheduling and controller use are reviewed.
Transfer Information: CSU Transferable
EH 104 Landscape Maintenance (3 Units)
Hours: 90 (36 lecture, 54 lab)
Covers basic landscape maintenance topics emphasizing sustainable methods of enriching soil health, composting, mulching, water efficient irrigation systems, pruning, fertilization, plant selection, turf management, insect control, and weed control. Personal health and safety emphasized. Student groups develop and implement sustainable landscape projects.
Transfer Information: CSU Transferable

EH 105 Landscape Construction (3 Units)
Skills Advisories: Proficiency in MATH 001 or MATH 041.
Hours: 90 (36 lecture, 54 lab)
Designed to familiarize students with basic landscape construction work, equipment and materials. Explores plan reading, grading, drainage, concrete, masonry, carpentry, electrical and plumbing, as well as C-27 landscape contractor’s license requirements, business practices and legalities of this specialty.
Transfer Information: CSU Transferable

EH 106 Greenhouse/Nursery Operations And Practices, Plant Propagation And Plant Recognition (3 Units)
Skills Advisories: Eligibility for ENG 098 and proficiency in MATH 001 or MATH 041.
Hours: 90 (36 lecture, 54 lab)
Introduces students to the greenhouse/nursery. Plant recognition is required for indoor plants, turf/groundcovers, bedding plants and herbaceous perennials. Greenhouse management includes maintenance, management and structure development.
Transfer Information: CSU Transferable
C-ID: AG-EH 116.

EH 107 Landscape Design (3 Units)
Skills Advisories: Proficiency in MATH 001 or MATH 041.
Hours: 72 (45 lecture, 27 lab)
Introduces students to basic design principles and drafting. Covering site plans, elevations and details.
Transfer Information: CSU Transferable

EH 108 Ornamental Horticulture (3 Units)
Skills Advisories: Proficiency in MATH 001 or MATH 041.
Hours: 72 (45 lecture, 27 lab)
Introduction to basic practices of growing and caring for woody plants, vines, palms, and other plants used in ornamental horticulture. Course includes identification, propagation, pruning, and relationship to the environment.
Transfer Information: CSU Transferable

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. The successful student receives Permaculture Design certification, recognized worldwide.
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, covering horticultural practices and methods, with focus on long-term sustainability and local ecological issues.
Transfer Information: CSU Transferable
C-ID: AG - PS104

EH 112 Ecological Restoration I (3 Units)
Hours: 90 (36 lecture, 54 lab)
Examines the principles and techniques of regional habitat restoration. Class work emphasizes the identification, collection, propagation and care of native plants.
Transfer Information: CSU Transferable

EH 113 Ecological Restoration II (3 Units)
Hours: 90 (36 lecture, 54 lab)
Review of the concepts and implementation of habitat restoration. Santa Barbara region habitats studied include chaparral, coastal sage scrub, oak woodland, and riparian Eco-niches. Emphasis on watersheds and riparian restoration. Principles of ecological recreation and restoration techniques include seed collection, propagation and project evaluation.
Transfer Information: CSU Transferable, UC Transferable

EH 120 Landscape Drafting I (3 Units)
Same as: DRFT 126
Skills Advisories: Eligibility for ENG 103 and proficiency in MATH 001 or MATH 041.
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 121 Landscape Drafting II (3 Units)
Same as: DRFT 127
Prerequisites: DRFT 126 or EH 126.
Skills Advisories: Eligibility for ENG 103 and proficiency in MATH 001 or MATH 041.
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)
Skills Advisories: Proficiency in MATH 001 or MATH 041.
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.
Skills Advisories: Eligibility for ENG 98 and proficiency in MATH 001 or MATH 041.
Hours: 300 (300 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