# ENVIRONMENTAL HORTICULTURE, ASSOCIATE OF SCIENCE (AS), ECOLOGICAL RESTORATION AND MANAGEMENT EMPHASIS

## **Overview**

**Emphasis in Ecological Restoration and Management** 

The Environmental Horticulture Program teaches the basic skills and provides state-of-the-art information required to develop a strong foundation for a variety of career specialties within the landscaping, ornamental horticulture and the regenerative and restoration industry. The program encourages professional standards, a strong work ethic and environmentally sound management practices.

Horticulture industry professionals from throughout the community serve as members of the college's Environmental Horticulture Advisory Committee. These "hands-on" professionals provide guidance, expertise and leadership in enhancing the program's response to community and industry needs. They meet yearly with program staff members, college administrators and student representatives to review program goals and objectives. Course offerings and content have been determined through this participation and are geared to meet the needs of the landscape, ornamental horticulture and habitat management trades.

On the college's East Campus, practical lab classes utilize two outdoor classroom gardens, the SBCC Lifescape and Chumash Point Ethnobotanical Preserve. The gardens are also the site of the nursery/ greenhouse unit. The Environmental Horticulture (EH) Program is designed to provide the student with the necessary skills at the apprentice level to begin work in a wide range of landscape trades. There are three vocational approaches within the Environmental Horticulture program: (1) the one-semester Skills Competency Award approach; (2) the Certificate of Achievement approach, where the certificate is awarded after the one-year (two-semester) format is successfully completed; and (3) the certificate can lead to any one of the four two-year A.S. Degree options in:

- a. Landscape Contracting, C-27 License (satisfying one or more years of State requirements)
- b. Environmental Landscape Design
- c. Nursery & Greenhouse Technology
- d. Ecological Restoration and Management

The program cannot guarantee job placement; however, many landscape industry employers, in search of energetic and skilled apprentices, contact the college to request referral of program graduates. The EH Program Skills Competency Award, EH Certificate and Certified Green Gardener, and Associate Degrees often provide expanding job opportunities.

# Requirements

**Associate Degree Graduation Requirements** 

Complete all of the following:

- 1. All Department Requirements listed below with a "C" or better or "P" in each course (at least 20% of the department requirements must be completed through SBCC).
- 2. One of the following three General Education options:
  - a. OPTION 1: A minimum of 18 units of SBCC General Education Requirements (https://catalog.sbcc.edu/degreescertificates-awards/#associatedegreestext) (Areas A-D) and Institutional Requirements (Area E) and Information Competency Requirement (Area F) OR
  - b. OPTION 2: IGETC (https://catalog.sbcc.edu/transfercurricula/#igetctext) Pattern OR
  - c. OPTION 3: CSU GE Breadth (https://catalog.sbcc.edu/transfer-curricula/#csugebtext) Pattern
- 3. A total of 60 degree-applicable units (SBCC courses numbered 100 and higher).
- Maintain a cumulative GPA of 2.0 or better in all units attempted at SBCC.
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- 6. A minimum of 12 units through SBCC.

| Code   | Title  | Units |
|--|--|-------|
| Department Requirements                              |  |       |
| BIOL 120   | Natural History  | 3-4   |
| or BIOL 122  | Ecology  |       |
| BOT 122  | Flowering Plant Identification                             | 3     |
| or BOT 123   | Field Botany   |       |
| DRFT/EH 126  | Landscape Drafting I                                       | 3     |
| EH 102   | Soils And Plant Nutrients                                  | 3     |
| EH 104   | Landscape Maintenance                                      | 3     |
| EH 109   | Permaculture Design  | 5     |
| EH 110   | Introduction to Horticulture                               | 3     |
| EH 112   | Ecological Restoration I                                   | 3     |
| EH 113   | Ecological Restoration II                                  | 3     |
| EH 290   | Work Experience In Environmental<br>Horticulture           | 4     |
| ENVS 110   | Humans And The Biological<br>Environment                   | 3     |
| ENVS 111   | Environmental Field Studies                                | 1     |
| GEOG/ERTH 171  | Introduction To Geographic<br>Information Systems And Maps | 2     |
| Complete at least one course from the following: 2-4 |  |       |
| ERTH 111   | Dynamic Earth - Physical Geology                           |       |
| or ERTH 111H   | Dynamic Earth - Physical Geology, Honors                   |       |
| GEOG 101/<br>ERTH 141                                | Physical Geography   |       |
| GEOG/ERTH 172  | Geographic Information Systems:<br>Software Applications   |       |

### Total Units 41.00-44.00

# **Learning Outcomes**

- 1. Describe the basic principles of botany, plant anatomy, taxonomy, reproduction, and plant identification.
- Demonstrate proper set-up and use of greenhouse environments for native plant propagation, including irrigation, ventilation, heating and cooling.

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- 3. Explain and demonstrate basic sexual and asexual plant propagation techniques for native plants, including seed sowing, use of cuttings, divisions, layer, and grafting.
- 4. Explain restoration project design, installation, management, monitoring, and assessment.
- 5. Explain the soil food web and how it is important to native plants and the soils they depend upon.
- 6. Identify and describe basic propagation and care requirements for native plants of southern California.

# **Recommended Sequence**

Make an appointment with your SBCC academic counselor through Starfish to create a Student Education Plan that reflects a recommended course sequence for this program that is tailored to your individual needs.

How to schedule an Academic Counseling appointment (https://www.sbcc.edu/counselingcenter/counselingappointments.php).