As of Fall 2022, the Environmental Horticulture & Urban Forestry major is no longer accepting new students. It has been absorbed into the Plant Sciences major as an area of specialization.

The Major Program

Students majoring in Environmental Horticulture & Urban Forestry learn how plants improve the environment and the quality of our lives. The major focuses on the biological and physical concepts and horticultural principles of plant production, management of plants and plant ecosystems in landscape settings and sociological aspects of plant/people interactions in the urban environment. Plants are used to revegetate and restore disturbed landscapes, control erosion and reduce energy and water consumption. The ornamental use of plants to improve the aesthetic quality of urban and rural landscapes, recreational areas, interiorscapes and commercial sites is an important aspect of this major. Students may select one or more of the following three areas of specialization: Floriculture/Nursery, Plant Biodiversity/Restoration, or Urban Landscape Management.

Internships & Career Opportunities

Students are encouraged to develop internships on or off campus to augment their activities in the classroom and laboratory. Internships are available with the department’s greenhouse facility, the UC Davis Arboretum, landscape designers, local nurseries, government agencies, regional non-profits, and restoration firms. Career opportunities in this field include growing and/or managing plants in a variety of settings, including nurseries & arboreta, consulting as an arborist, or as an urban landscape, or restoration horticulturist; business ownership; park management and landscape contracting; working in the public or private sector, or for non-profit organizations.

Major Advisor

Daniel Potter

Advising Center for the major, including peer advising, is located in 1220 Plant & Environmental Sciences; 530-752-9770.

Code    Title                              Units
Preparatory Subject Matter
Recommended as part of the College English Composition Requirement or the Words & Images Core Literacy Component:
CMN 001  Introduction to Public Speaking

Environmental Horticulture
ENH 001  Introduction to Environmental Horticulture/Urban Forestry  3
ENH 006  Introduction to Environmental Plants  4

Landscape Architecture
LDA 030  History of Environmental Design  4

BIS 002A  Introduction to Biology: Essentials of Life on Earth  5
BIS 002B  Introduction to Biology: Principles of Ecology & Evolution  5

PLS 002  Botany & Physiology of Cultivated Plants  4
PLS 021  Application of Computers in Technology  3
PLS 021V Application of Computers in Technology  3

CHE 002A  General Chemistry  5
CHE 002B  General Chemistry  5

ESP 001  Environmental Analysis  3-4
ESP 010  Current Issues in the Environment  3-4

MAT 016A  Short Calculus  3
MAT 016V  Short Calculus  3
MAT 017A  Elementary Statistics  3
MAT 017V  Elementary Statistics  3

MAT 016A or STA 013  Short Calculus  3
MAT 017A or STA 013Y Elementary Statistics  3

MAT 016A or STA 013  Short Calculus  3
MAT 017A or STA 013Y Elementary Statistics  3

PHY 001A  Principles of Physics  3
PHY 001B  Principles of Physics  3

UWP 102B  Writing in the Disciplines: Biology  3
UWP 102G  Writing in the Disciplines: Environmental Writing  3
UWP 104E  Writing in the Professions: Science  3

Other upper division composition course. May overlap with college composition requirement; may be satisfied by passing the English Composition Exam.

Lower Division Restricted Electives
Choose one lower division resource science course and one lower division social science/humanities course in consultation with advisor; minimum 6 units.


Preparatory Subject Matter Subtotal  59-62

Depth Subject Matter
ENH 102  Physiological Principles in Environmental Horticulture  3-4
ENH 105  Taxonomy & Ecology of Environmental Plant Families  4
ENH 110  Physiological Principles in Environmental Horticulture  3-4
ENH 105  Taxonomy & Ecology of Environmental Plant Families  4
PLS 100A  Metabolic Processes of Cultivated Plants  3-4
PLS 100A  Metabolic Processes of Cultivated Plants  3-4

PLS/PLB 102  California Floristics  4
PLB/EVE 108  Systematics & Evolution of Angiosperms  4
PLB/EVE 117  Plant Ecology  4
PLB/EVE 117  Plant Ecology  4
PLS 150  Sustainability & Agroecosystem Management  4
PLS 150  Sustainability & Agroecosystem Management  4


Preparatory Subject Matter Subtotal  59-62

Depth Subject Matter
ENH 102  Physiological Principles in Environmental Horticulture  3-4
ENH 105  Taxonomy & Ecology of Environmental Plant Families  4
PLS 100A  Metabolic Processes of Cultivated Plants  3-4
PLS 100A  Metabolic Processes of Cultivated Plants  3-4
PLS 171  Principles & Practices of Plant Propagation  4
PLS 171  Principles & Practices of Plant Propagation  4
SSC 100  Principles of Soil Science  5
SSC 100  Principles of Soil Science  5

Choose two  7-9


Preparatory Subject Matter Subtotal  59-62

Depth Subject Matter
ENH 102  Physiological Principles in Environmental Horticulture  3-4
ENH 105  Taxonomy & Ecology of Environmental Plant Families  4
PLS 100A  Metabolic Processes of Cultivated Plants  3-4
PLS 100A  Metabolic Processes of Cultivated Plants  3-4
PLS 171  Principles & Practices of Plant Propagation  4
PLS 171  Principles & Practices of Plant Propagation  4
SSC 100  Principles of Soil Science  5
SSC 100  Principles of Soil Science  5

Choose two  7-9

### Environmental Horticulture & Urban Forestry, Bachelor of Science

**ENT 110**  
Arthropod Pest Management

**NEM 100**  
Plant Nematology

**PLP 120**  
Introduction to Plant Pathology

**PLS 105**  
Concepts in Pest Management

**PLS 176**  
Introduction to Weed Science

- Internship or research; must be approved by major advisor.  
  3

### Upper Division Restricted Electives

In consultation with an advisor, choose three upper division courses in the areas of resource sciences and social sciences/humanities; at least one course must come from each of these two areas; minimum 9 units.

- Depth Subject Matter Subtotal  
  39-43

### Areas of Specialization

<table>
<thead>
<tr>
<th>Areas of Specialization</th>
<th>Code</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>Floriculture/Nursery Option (p. 2)</td>
<td>ENH 120</td>
<td>Management of Container Media</td>
<td>3</td>
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<tr>
<td></td>
<td>ENH 125</td>
<td>Greenhouse &amp; Nursery Crop Production</td>
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<td>ABT/SAF 165</td>
<td>Irrigation Practices for an Urban Environment</td>
<td>3</td>
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<tr>
<td></td>
<td>ENT 135</td>
<td>Introduction to Biological Control</td>
<td>4</td>
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<tr>
<td></td>
<td>PLS 100C</td>
<td>Environmental Interactions of Cultivated Plants</td>
<td>3-4</td>
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<tr>
<td></td>
<td>PLS 158</td>
<td>Mineral Nutrition of Plants</td>
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<tr>
<td></td>
<td>SSC 109</td>
<td>Sustainable Nutrient Management</td>
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</tbody>
</table>

- Total Units  
  18-19

### Urban Landscape Management Option

**ENH 100**  
Urban Forestry  
4

**ENH 133**  
Woody Plants in the Landscape: Growth, Ecology & Management  
4

**ABT/SAF 165**  
Irrigation Practices for an Urban Environment  
3

**PLS 162**  
Urban Ecology  
3

**SAS 018**  
GIS & Society  
3-4

- Total Units  
  17-18

### Plant Biodiversity/Restoration Option

<table>
<thead>
<tr>
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<th>Title</th>
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<tbody>
<tr>
<td>ENH 160</td>
<td>Restoration Ecology</td>
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<tr>
<td>ENH 160L</td>
<td>Restoration Ecology Laboratory</td>
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<td>Choose one:</td>
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<td>3-5</td>
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<tr>
<td>ENH 150</td>
<td>Genetics &amp; Plant Conservation: The Biodiversity Crisis</td>
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<tr>
<td>EVE 100</td>
<td>Introduction to Evolution</td>
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</tr>
<tr>
<td>PLB/PLS 116</td>
<td>Plant Morphology &amp; Evolution</td>
<td></td>
</tr>
</tbody>
</table>

- (a) Choose one: | | 3-4 |
| ESM 141 | Role of Fire in Natural Ecosystems | |
| ESP 127 | Plant Conservation Biology | |
| ESP 155L | Wetland Ecology Laboratory | |
| PLS 130 | Rangelands: Ecology, Conservation & Restoration | |
| PLS 150 | Sustainability & Agroecosystem Management | |
| WFC 155 | Wildlife Habitat Ecology & Conservation | |

- Total Units  
  17-18

- (b) Choose one: | | 3-5 |
| ESP 155 | Wetland Ecology | |
| PLB/EVE 108 | Systematics & Evolution of Angiosperms | |
| PLB/EVE 117 | Plant Ecology | |
| PLB/EVE 119 | Population Biology of Invasive Plants & Weeds | |
| PLS 102 | California Floristics | |
| PLS/ESM 144 | Trees & Forests | |
| PLS 147 | California Plant Communities | |
| & 147L | and California Plant Communities Field Study | |
| PLS 163 | Ecosystem & Landscape Ecology | |
| PLS 176 | Introduction to Weed Science | |
| WFC 156 | Plant Geography | |
| WFC 157 | Coastal Ecosystems | |

Choose one additional class from section a or b.  
3-5

- Total Units  
  17-24