



# Sustainable and Organic Horticulture Program of Study

The Sustainable and Organic Horticulture Concentration in the Department of Horticulture prepares students for careers in farming, community food systems and urban agriculture. This option is also excellent for students interested in graduate study. The “Sustainability” or “Sustainable Agriculture and Food System” specializations may also be completed.

## University Requirements:

**Writing Tier I:** Writing, Rhetoric & American Cultures 101  
**Tier II Writing Course** (HRT 404)

**Integrative Studies in Social Science**  
(ISS 2XX & ISS 3XX)

**Integrative Studies in Arts & Humanities**  
(IAH 'A', 201-210, & IAH 'B', 211- higher)

### Integrative Studies in Biological & Physical Sciences (Alternate Track)

CEM 141 (4) General Chemistry  
CEM 161 (1) Chemistry Laboratory  
CEM 143 (4) Organic Chemistry

PLB 105 (3) Plant Biology  
PLB 106 (1) Plant Biology Laboratory

## Requirements for all students in this concentration: 13 credits

CSS 360 (3) Soil Biology  
ENT 479 (3) Organic Pest Management  
HRT 251 (3) Organic Farming Principles and Practices  
HRT 253 (1) Compost Production and Use  
PLP 405 (3) Introduction to Plant Pathology

## Production Courses: 9 credits

CSS 288 (3) Weed Science  
HRT 221 (3) Greenhouse Structures and Management  
HRT 242 (1) Passive Solar Greenhouses for Protected Cultivation  
HRT 243 (1) Organic Transplant Production  
HRT 332 (3) Tree Fruit Production  
HRT 336 (2) Viticulture and Berry Production  
HRT 341 (3) Vegetable Production & Management  
HRT 475 (3) International Studies in Horticulture  
HRT 490 (1-2) Independent Study

## CANR Requirements:

College Algebra & Trigonometry or Algebra & Statistics  
(MTH 116, or MTH 103 + MTH 114, or MTH 103 + STT 200/01)

Micro or Macro Economics (EC 201 or 202)

## Dept. Requirements for all majors: 21 credits

CSS 210 (3) Introduction to Soil & Landscape Science  
HRT 203 (3) Principles of Horticulture  
HRT 204 (2) Plant Propagation  
HRT 205 (1) Plant Mineral Nutrition  
HRT 206 (1) Pruning Techniques  
HRT 207 (1) Horticulture Career Development  
HRT 361 (3) Applied Plant Physiology  
HRT 362 (1) Applied Crop Improvement  
HRT 404 (3) Horticulture Management (Tier II Writing)  
HRT 493 (3) Internship

## Science Courses: 9 credits

CSUS 343 (3) Community Food and Agricultural Systems  
HRT 401 (3) Advanced Horticultural Crop Physiology  
HRT 403 (3) Handling and Storage of Horticultural Crops  
HRT 407 (3) Horticulture Marketing  
HRT 451 (3) Biotechnology Applications for  
Plant Breeding and Genetics  
HRT 486 (3) Biotechnology in Agriculture:  
Applications and Ethical Issues