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.

**University Requirements:**

- **Writing Tier I:** Writing, Rhetoric & American Cultures
  - 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 326 (2) Weed Science
- CSS 226L (1) Weed Science Lab
- HRT 218 (2) Irrigation Systems for Horticulture
- HRT 218L (1) Irrigation Lab
- 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 490 (1-2) Independent Study

**CANR Requirements:**

- College Algebra  MTH 103
- Statistical Methods  STT 200
- Micro or Macro Economics (EC 201 or 202)

**Dept. Requirements for all majors: 21 credits**

- CSS 210 (3) Introduction to Soil & Landscape Science
- CSS 350 (3) Plant Genetics
- HRT 203 (3) Principles of Horticulture
- HRT 204 (3) Plant Propagation and Use
- HRT 205 (1) Plant Mineral Nutrition
- HRT 207 (1) Horticulture Career Development
- HRT 361 (3) Applied Plant Physiology
- 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