

# Horticulture Degree Checklist

Name: \_\_\_\_\_  
ID: \_\_\_\_\_  
Entering Status: \_\_\_\_\_

Option: **Horticultural Research**  
Term Entering: \_\_\_\_\_  
From: \_\_\_\_\_

## University Core Requirements:

(No single course can satisfy more than one core area)

### Writing/Health

- \_\_\_\_\_ WR 121 – English Composition (3) (Minimum passing grade of C–)
- \_\_\_\_\_ WR II (3)
- \_\_\_\_\_ COMM (3)
- \_\_\_\_\_ Writing Intensive (HORT 318) (3)
- \_\_\_\_\_ HHS 231 – Lifetime Fitness for Health (2)
- \_\_\_\_\_ HHS 24\_ – Lifetime Fitness or PAC (1)
- \_\_\_\_\_ Foreign Language (if deficient; waived for pre-1997 HS graduates)

### Perspectives

(No more than 2 courses in one department)

- \_\_\_\_\_ Western Culture \_\_\_\_\_
- \_\_\_\_\_ Cultural Diversity \_\_\_\_\_
- \_\_\_\_\_ Literature/Arts \_\_\_\_\_
- \_\_\_\_\_ Social Processes \_\_\_\_\_
- \_\_\_\_\_ Difference, Power, Dis. \_\_\_\_\_
- \_\_\_\_\_ Biological Science (Met by major requirements)
- \_\_\_\_\_ Physical Science (Met by major requirements)
- \_\_\_\_\_ Phys. or Biol. Science (Met by major requirements)

### Math

- \_\_\_\_\_ MTH 105, 111, 112, 211, 241, 245 or 251 (4) (Met by major requirements)

### Synthesis/Upper Division – choose from provided list

(Each course from a different department)

- \_\_\_\_\_ Contemp. Global Issues (3) \_\_\_\_\_
- \_\_\_\_\_ Science, Technology, Society (3) \_\_\_\_\_

### Major Core:

#### General Science

- \_\_\_\_\_ MTH 251 – Differential Calculus (4)
- \_\_\_\_\_ BI 211 – Principles of Biology (4)
- \_\_\_\_\_ BI 212 – Principles of Biology (4)
- \_\_\_\_\_ BI 213 – Principles of Biology (4)
- \_\_\_\_\_ CH 231 – General Chemistry (4) & CH 261 – Lab for Chemistry 231 (1)
- \_\_\_\_\_ CH 232 – General Chemistry (4) & CH 262 – Lab for Chemistry 232 (1)
- \_\_\_\_\_ CH 233 – General Chemistry (4) & CH 263 – Lab for Chemistry 233 (1)

(Students must receive a grade of C-, or higher, to continue on to the next chemistry course in the series)

#### Agricultural Science

- \_\_\_\_\_ BOT 331 – Plant Physiology (4)
- \_\_\_\_\_ BOT 350 – Introductory Plant Pathology (4)
- \_\_\_\_\_ CROP 440 – Weed Management (4)
- \_\_\_\_\_ ENT 311 – Introduction to Insect Pest Management (4)
- \_\_\_\_\_ SOIL 205 – Soil Science (3) & SOIL 206 – Lab (1)  
or CSS 205 – Soil Science (4)

#### Orientation

- \_\_\_\_\_ HORT 112 – Intro. to Horticultural Systems Practices. & Careers (2)

#### Horticultural Science

- \_\_\_\_\_ HORT 301 – The Biology of Horticulture (3)
- \_\_\_\_\_ HORT 311 – Plant Propagation (4)
- \_\_\_\_\_ HORT 316 – Plant Nutrition (4)

#### Experiential Learning

- \_\_\_\_\_ HORT 403 – Thesis (6-12)
- \_\_\_\_\_ HORT 412 – Career Exploration: Internships & Research Projects (1)

## Option Requirements

### Plant Materials (Select 1 of the following courses)

- \_\_\_\_\_ BOT 313 – Plant Structure (4)
- \_\_\_\_\_ BOT 321 – Plant Systematics (4)
- \_\_\_\_\_ BOT 425 – Flora of the Pacific Northwest (3)
- \_\_\_\_\_ CROP 200 – Crop Ecology & Morphology (3)
- \_\_\_\_\_ FES 241 – Dendrology (3)
- \_\_\_\_\_ HORT 226 – Landscape Plant Materials I (4)
- \_\_\_\_\_ HORT 228 – Landscape Plant Materials II (4)
- \_\_\_\_\_ HORT 251 – Temperate Tree Fruit, Berries, Grapes, and Nuts (2) *alt. year*
- \_\_\_\_\_ HORT 255 – Herbaceous Ornamental Plant Materials (3)
- \_\_\_\_\_ HORT 433 – Systematics & Adaptations of Vegetable Crops (4)

### Ecology (Select 1 of the following courses)

- \_\_\_\_\_ BI 370 – Ecology (3)
- \_\_\_\_\_ BOT 341 – Plant Ecology (4)
- \_\_\_\_\_ HORT 318 – Applied Ecology of Managed Ecosystems (3)

### Technology (Select 1 of the following courses)

- \_\_\_\_\_ HORT 414 – Precision Agriculture (4)
- \_\_\_\_\_ PBG 441 – Plant Tissue Culture (4)

### Horticultural Communication

- \_\_\_\_\_ HORT 406 – Projects: Data Presentations (1)
- \_\_\_\_\_ HORT 407 – Seminar (1)
- \_\_\_\_\_ HORT 411 – Horticulture Book Club (1)

### (Select 1 of the following Writing Intensive Courses)

- \_\_\_\_\_ BOT 323 – Flowering Plants of the World (WIC) (3)
- \_\_\_\_\_ CROP/SOIL 325 – Ag & Environmental Predicaments (3) (WIC)
- \_\_\_\_\_ HORT 318 – Applied Ecology of Managed Ecosystems (3) (WIC)

### Capstone (Select 1 of the following courses)

- \_\_\_\_\_ HORT 452 – Berry & Grape Physiology & Culture (4) *alt. year*
- \_\_\_\_\_ HORT 453 – Grapevine Growth & Physiology (3)
- \_\_\_\_\_ HORT 454 – Principles & Practices of Vineyard Production (3)
- \_\_\_\_\_ HORT 463 – Seed Biology (3) *alt. year*
- \_\_\_\_\_ HORT 480 – Case Studies in Cropping Systems Management (4)
- \_\_\_\_\_ HORT 495 – Horticultural Management Plans (3)
- \_\_\_\_\_ PBG 450 – Plant Breeding (4)

### Advanced Horticultural Science

- \_\_\_\_\_ PBG 430 – Plant Genetics (3)

### Math and Science Foundation Courses

- \_\_\_\_\_ BB 350 – Elementary Biochemistry (4)
- \_\_\_\_\_ CH 331 – Organic Chemistry (4)
- \_\_\_\_\_ CH 332 – Organic Chemistry (4)
- \_\_\_\_\_ MTH 251 – Differential Calculus (4)
- \_\_\_\_\_ MTH 252 – Integral Calculus (4)
- \_\_\_\_\_ PH 201 – General Physics (5)
- \_\_\_\_\_ PH 202 – General Physics (5)
- \_\_\_\_\_ ST 351 – Introduction to Statistical Methods (4)

Select 12 credits of upper-division Horticulture and Life Science courses (with approval of research mentor and advisor)

Grade	Class	Credits

Students in this option must take HORT 403 – Thesis for the Experiential Learning requirement in the major core.

## Ecology & Sustainability Ecosystems Courses (Meets Synthesis Requirements)

(Each course must be from a different department)

### Contemporary Global Issues (Select 1 of the following courses)

- \_\_\_\_\_ AEC 351 – Natural Resource Economics & Policy (3)
- \_\_\_\_\_ AEC 352 – Environmental Economics and Policy (3)
- \_\_\_\_\_ BI 301 – Human Impacts on Ecosystems (3)
- \_\_\_\_\_ BI 306 – Environmental Ecology (3)
- \_\_\_\_\_ CROP 330 – World Food Crops (3)
- \_\_\_\_\_ FES 365 – Issues in Natural Resources Conservation (3)
- \_\_\_\_\_ FW 325 – Global Crises in Resource Ecology (3)
- \_\_\_\_\_ GEOG 300 – Sustainability for the Common Good (3)
- \_\_\_\_\_ GEOG 330 – Geography International Development & Globalization (3)
- \_\_\_\_\_ HORT/ENT 331 – Pollinators in Peril (3)
- \_\_\_\_\_ SUS 350 – Sustainable Communities (3)
- \_\_\_\_\_ Z 349 – Biodiversity: Causes, Consequences & Conservation (3)

### Science, Technology and Society (Select 1 of the following courses)

- \_\_\_\_\_ ANS 315 – Contentious Social Issues in Animal Agriculture (3)
- \_\_\_\_\_ ANS/FES/FW 485 – Consensus and Natural Resources (3)
- \_\_\_\_\_ ATS 320 – The Changing Climate (3)
- \_\_\_\_\_ BI 348 – Human Ecology (3)
- \_\_\_\_\_ BI/FES 435 – Genes and Chemicals in Agriculture: Value and Risk (3)
- \_\_\_\_\_ BOT 324 – Fungi in Society (3)
- \_\_\_\_\_ CH 374 – Technology, Energy, and Risk (3)
- \_\_\_\_\_ SOIL 395 – World Soil Resources (3)
- \_\_\_\_\_ ENGR 350 – Sustainable Engineering (3)
- \_\_\_\_\_ ENGR 363 – Energy Matters (3)
- \_\_\_\_\_ ENSC 479 – Environmental Case Studies (3)
- \_\_\_\_\_ FES/NR/RNG 477 – Agroforestry (3)
- \_\_\_\_\_ FST 421 – Food Law (3)
- \_\_\_\_\_ FW 485 – Consensus & Natural Resources (3)
- \_\_\_\_\_ GEOG 300 – Sustainability for the Common Good (3)
- \_\_\_\_\_ GEOG 340 – Introduction to Water Science and Policy (3)
- \_\_\_\_\_ HORT 330/ENT 300 – Plagues, Pests, and Politics (3)
- \_\_\_\_\_ HST 481 – Environmental History of the United States (4)
- \_\_\_\_\_ HSTS 421 – Technology & Change (4)
- \_\_\_\_\_ HSTS 470 – Ecology & History: Landscapes Columbia Basin (3)
- \_\_\_\_\_ NUTR 312 – Issues in Nutrition & Health (3)
- \_\_\_\_\_ PH 313 – Energy Alternatives (3)
- \_\_\_\_\_ PHL 325 – Scientific Reasoning (4)
- \_\_\_\_\_ PS 476 – Science & Politics (4)
- \_\_\_\_\_ SOIL 395 – World Soil Resources (3)
- \_\_\_\_\_ SUS 304 – Sustainability Assessment (4)

**Total Units (need 180)** \_\_\_\_\_

**Upper Div. Units (need 60)** \_\_\_\_\_

## Grade Requirements

Students pursuing a major or minor in horticulture are required to receive a grade of C– or better in all HORT (horticulture) and PBG (plant breeding and genetics) courses that are required for completion of their major and option, or minor. If a grade below C– is received in a HORT or PBG course required for their major and option, or minor, a student will need to retake the course and receive a grade of C– or better. If the grade below a C– was received for a course that is part of a group of courses where the student can select which courses to take (i.e., they do not need to take all of the courses, just a specified number of courses or credits) then it would be acceptable for the student to substitute a course for the one that they had received a grade below a C–. For example, in most of our options, a student needs to complete three of four plant identification courses. If a student received a grade lower than a C– in one of the classes, they could either retake the same course or complete the other three courses with a grade of C– or better.