

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)
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)

- Cultural Diversity
Literature/Arts
Social Processes
Western Culture
Difference, Power, Dis.
Biological Science
Physical Science
Phys. or Biol. Science

Math

MTH 105, 111, 112, 211, 241, 245 or 251 (4)
(Students must receive a grade of C-, or higher, to continue on to the next math course)

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)
(Prereq of C- or higher in MTH 111, or in MTH 112 if taking MTH 251)

- 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)

- BI 211 - Principles of Biology (4)
BI 212 - Principles of Biology (4)
BI 213 - Principles of Biology (4)

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 - Introduction 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)

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) (Prereq of C- or higher in CH 123 or CH 233+263)
CH 332 - Organic Chemistry (4) (Prereq of C- or higher in CH 331)
MTH 251 - Differential Calculus (4) (Prereq of C- or higher in MTH 112)
MTH 252 - Integral Calculus (4) (Prereq of C- or higher in MTH 252)
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)

Table with 3 columns: Grade, Class, Credits. Includes horizontal lines for data entry.

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)

**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.

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

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