Horticulture Degree Checklist

Name: ________________________________
ID: ________________________________
Entering Status: __________________________

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 (BOT 323, CROP/SOIL 325 or 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 112 (4) or MTH 241 (4) or MTH 245 (4)
_______ BI 211 – Principles of Biology (4)
_______ BI 212 – Principles of Biology (4)
_______ BI 213 – Principles of Biology (4)
_______ CH 121. General Chemistry (5)
or 231 – General Chemistry (4) and CH 261 Laboratory for Chemistry 231 (1)
_______ CH 122. General Chemistry (5)
or 232 – General Chemistry (4) and CH 262 Laboratory for Chemistry 232 (1)
_______ CH 123. General Chemistry (5)
or 233 – General Chemistry (4) and CH 263 Laboratory for Chemistry 233 (1)

Orientation
_______ CROP/HORT 101 – Intro. to Horticulture, Crop, Soil & Insect Science (1)

Plant, Soil and Insect Science
_______ BOT 331 – Plant Physiology (4)
_______ BOT 350—I nductory Plant Pathology (4)
_______ CROP 440—Weed Management (4)
_______ ENT 311 – Intro. to Insect Pest Management (4)
_______ SOIL 205 – Soil Science (4)

Experiential Learning
_______ PBG 403 or 410 –Thesis/Internship (3-12 cr)
_______ CROP/HORT 407 – Senior Seminar (1)

Ecology (Select 1 of the following courses)
_______ BI 370 – Ecology (3)
_______ BOT 341 – Plant Ecology (4)
_______ HORT 318 – Applied Ecology of Managed Ecosystems (WIC) (3)

Technology
_______ PBG 441 – Plant Tissue Culture (4)

Writing Intensive (Select 1 of the following courses)
_______ BOT 323 – Flowering Plants of the World (WIC) (3)
_______ CROP/SOIL 325—Ag & Environmental Predicaments (WIC) (3)
_______ HORT 318 – Applied Ecology of Managed Ecosystems (WIC) (3)

Capstone
_______ PBG 450 – Plant Breeding (4)

Option: Plant Breeding & Genetics
Term Entering: __________________________
From: __________________________

Horticultural Science
_______ HORT 301 – The Biology of Horticulture (3)
_______ HORT 311 – Plant Propagation (4)
_______ HORT 316 – Plant Nutrition (4)
_______ HORT 411 – Horticulture Book Club (1)
_______ HORT 412 – Career Exploration (1)

Plant Materials
(Select 2 of the following courses)
_______ BOT 313 – Plant Structure (4)
_______ BOT 321 – Plant Systemsatics (4)
_______ BOT 425 – Flora of the Pacific Northwest (3)
_______ CROP 200 – Crop Ecology & Morphology (3)
_______ FES 141 – Tree & Shrub Identification (3)
_______ HORT 226 – Landscape Plant Materials I (4)
_______ HORT 228 – Landscape Plant Materials II (4)
_______ HORT 251 – Temperate Tree Fruits, Berries, Grapes, and Nuts (2) alt. year
_______ HORT 255 – Herbaceous Ornamental Plant Materials (3)
_______ HORT 433 – Systematics & Adaptations of Veg. Crops (4) alt. year

Science and Technology
_______ HORT 463 – Seed Biology (3) alt years
_______ PBG 430 – Plant Genetics (3)
_______ ST 351 – Intro to Statistical Methods (4)

Production and Technology
(Select 4 of the following courses, for 12 credits minimum)
_______ BOT 332 – Lab Techniques in Plant Bio (3)
_______ CROP 199 – Special Studies: Issues in Sustainable Ag (1)
_______ CROP/ HORT 300—Crop Production in PNW Agroecosystems (4)
_______ CROP 310 – Forage Production (4)
_______ CROP 330 – World Food Crops (3)
_______ CROP 460 – Seed Production (3)
_______ CROP 590 – Experimental Design in Agriculture (4)
_______ CSS 320 – Principles of Oil & Fiber Crop Production (1)
_______ HORT 321 – Principles of Cereal Crop Production (1)
_______ CSS 322 – Principles of Potato Production (1)
_______ HORT 260 – Organic Farming & Gardening (3)
_______ HORT 351 – Floriculture & Greenhouse Systems (4) alt. year
_______ HORT 361 – Plant Nursery Systems (4) alt. year
_______ HORT 452 – Berry & Grape Physiology & Culture (4) alt. year
_______ HORT 453 – Grapevine Growth & Physiology (3)
_______ HORT 454 – Principles & Practices of Vineyard Production (3)
_______ MB 302 – General Microbiology (3)
_______ MB 303 – General Microbiology Lab (2)
_______ PBG 513 – Plant Genetic Engineering (3)
_______ SOIL 316 – Nutrient Cycling in Agroecosystems (4)

Plant Synthesis
_______ CROP/HORT 480 – Case Studies in Cropping Systems Management (4)

Ecology & Sustainability Ecosystems Courses (Meets Synthesis Requirements)
(Each course must be from a different department)

Contemporary Global Issues (Select 1 of the following courses)
_______ AREC 351 – Natural Resource Economics & Policy (3)
_______ BI 301 – Human Impacts on Ecosystems (3)
_______ BI 306 – Environmental Ecology (3)
_______ BI 349 – Biodiversity: Causes, Consequences & Conservation (3)
_______ CROP 330 – World Food Crops (3)
_______ FES 365 – Issues in Natural Resources Conservation (3)
_______ FW 325 – Global Crises in Resource Ecology (3)
_______ GEO 300 – Sustainability for the Common Good (3)
_______ GEO 330 – Geography of International Development & Globalization (3)
### Science, Technology and Society (Select 1 of the following courses)

- ANS 315 – Contentious Social Issues in Animal Agriculture (3)
- AREC 352 – Environmental Economics & Policy (3)
- BI/FES 435 – Genes and Chemicals in Agriculture: Value and Risk (3)
- CH 374 – Technology, Energy, and Risk (3)
- CSS/SOIL 395 – World Soil Resources (3)
- ENGR 350 – Sustainable Engineering (3)
- ENSC 479 – Environmental Case Studies (3)
- FST 421 – Food Law (3)
- FW 485 – Consensus & Natural Resources (3)
- GEO 300 – Sustainability for the Common Good (3)
- GEO 335 – Introduction to Water Science and Policy (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)
- PS 476 – Science & Politics (4)
- RNG 477 – Agroforestry (3)
- Z 348 – Human Ecology (3)

Total Units (need 180) __________

Upper Div. Units (need 60) _______

### Research Track (optional)

- HORT 406 – Projects: Data Presentations (1)
- MTH 251 – Differential Calculus (4)
- MTH 252 – Integral Calculus (4)
- ST 351 – Introduction to Statistical Methods (4)

(Select 3 of the following)

- BB 350 – Elementary Biochemistry (4)
- BI 370 – Ecology (3)
- BOT 341 – Plant Ecology (4)
- CH 331 – Organic Chemistry (4)
- CH 332 – Organic Chemistry (4)
- CH 337 – Organic Chemistry Lab (4)
- MB 230 – Introductory Microbiology (4)
- PH 201 – General Physics (5)
- PH 202 – General Physics (5)

### Grade Requirements

Students pursuing an option in Plant Breeding and Genetics, under the Horticulture Major, and under the Crop & Soil Science Major, are required to receive a grade of C- or better in all BOT, CROP, CSS, FOR, HORT, MB, PBG, SOIL and ST courses required within their major and option.